GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:48:05 ; Search time 26.3333 Seconds
(without alignments)
58.797 Million cell updates/sec

Title: US-09-912-414-2
Perfect score: 45
Sequence: 1 WVRWHF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 3526

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_23:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*
16: sp_bacteriap:*
17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	28	62.2	9	8	Q8SHF0	Q8shf0 chamaeleo n
2	24	53.3	8	8	Q94VF6	Q94vf6 varanus job
3	24	53.3	10	8	P92632	P92632 eremias gra
4	23	51.1	10	8	Q9TG41	Q9tg41 ophisaurus
5	22	48.9	8	8	Q94VJ4	Q94vj4 varanus ben
6	22	48.9	8	13	P79940	P79940 xenopus lae
7	22	48.9	10	8	Q9B4X0	Q9b4x0 notophthalm
8	22	48.9	10	8	Q958L2	Q9581l2 rana tempor
9	22	48.9	10	8	Q958L8	Q9581l8 rana catesb
10	22	48.9	10	8	Q958K6	Q958k6 rana pretio
11	22	48.9	10	8	Q958K0	Q958k0 rana cascad
12	22	48.9	10	8	Q958L5	Q9581l5 rana sylvat
13	22	48.9	10	8	Q958K3	Q958k3 rana aurora
14	22	48.9	10	8	Q94NH4	Q94nh4 rana muscos
15	22	48.9	10	8	Q94VD2	Q94vd2 varanus pan
16	21	46.7	8	8	Q94VC1	Q94vc1 varanus rud
17	21	46.7	8	8	Q9TD02	Q9td02 terranatos
18	21	46.7	8	8	Q9T4Y2	Q9t4y2 asterina pe
19	21	46.7	9	8	Q9T688	Q9t688 gecko gecko
20	21	46.7	10	8	Q9T8K7	Q9t8k7 liolaemus m
21	21	46.7	10	8	Q9T8N1	Q9t8n1 liolaemus p
22	21	46.7	10	8	O79903	O79903 oplurus cuv
23	21	46.7	10	8	Q8W969	Q8w969 anolis orto
24	21	46.7	10	8	Q8WDH8	Q8wdh8 anolis mest
25	21	46.7	10	8	Q9T8T6	Q9t8t6 liolaemus m
26	21	46.7	10	8	Q9T8L3	Q9t8l3 liolaemus l
27	21	46.7	10	8	P92616	P92616 aspidosceli
28	21	46.7	10	8	Q9T8G8	Q9t8g8 liolaemus c
29	21	46.7	10	8	Q958K9	Q958k9 rana boylii
30	21	46.7	10	8	Q9TFU9	Q9tfu9 teratoscinc
31	21	46.7	10	8	Q9T8X7	Q9t8x7 phymaturus
32	21	46.7	10	8	O79885	O79885 anolis pate
33	21	46.7	10	8	Q9T8Q5	Q9t8q5 liolaemus l
34	21	46.7	10	8	P92654	P92654 euprepis au
35	21	46.7	10	8	Q9T8L0	Q9t810 liolaemus o
36	21	46.7	10	8	Q9T8W8	Q9t8w8 liolaemus b
37	21	46.7	10	8	Q9T8R4	Q9t8r4 liolaemus p
38	21	46.7	10	8	Q9T8M8	Q9t8m8 liolaemus m
39	21	46.7	10	8	Q9T8S1	Q9t8s1 liolaemus l
40	21	46.7	10	8	Q9T8S4	Q9t8s4 liolaemus c
41	21	46.7	10	8	Q9ZYU4	Q9zyu4 sceloporus
42	21	46.7	10	8	P92758	P92758 teratoscinc
43	21	46.7	10	8	Q9T8T9	Q9t8t9 liolaemus l
44	21	46.7	10	8	Q9ZYT5	Q9zyt5 uta stansbu
45	21	46.7	10	8	Q9T8J8	Q9t8j8 liolaemus w

ALIGNMENTS

RESULT 1
Q8SHF0
ID Q8SHF0 PRELIMINARY; PRT; 9 AA.
AC Q8SHF0;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Cytochrome c oxidase subunit I (Fragment).
GN COI.
OS Chamaeleo namaquensis.
OG Mitochondrion.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Lepidosauria; Squamata; Iguania; Acrodonta; Chamaeleonidae; Chamaeleo.
OX NCBI_TaxID=179917;
RN [1]
RP SEQUENCE FROM N.A.
RA Townsend T.M., Larson A.L.;
RT "Molecular Phylogenetics and Mitochondrial Genomic Evolution in the
RT Chamaeleonidae (Reptilia, Squamata).";
RL Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF448757; AAL90553.1; -.
KW Mitochondrion.
FT NON_TER 9 9
SQ SEQUENCE 9 AA; 1205 MW; 358CB72733640733 CRC64;

Query Match 62.2%; Score 28; DB 8; Length 9;
Best Local Similarity 75.0%; Pred. No. 8.3e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 WVRW 4
              |:||
Db          2 WLRW 5
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RESULT 2
Q94VF6
ID Q94VF6 PRELIMINARY; PRT; 8 AA.
AC Q94VF6;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)

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DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Varanus jobiensis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OX   NCBI_TaxID=169843;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407507; AAL10075.1; -.
KW   Mitochondrion.
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1144 MW;  EFD729DB436411A6 CRC64;

  Query Match             53.3%;  Score 24;  DB 8;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 8.3e+05;
  Matches    3;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          3 RWHF 6
              ||:|
Db          3 RWYF 6


RESULT 3
P92632
ID   P92632      PRELIMINARY;      PRT;    10 AA.
AC   P92632;
DT   01-MAY-1997 (TrEMBLrel. 03, Created)
DT   01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
DT   01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   CO1.
OS   Eremias grammica.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Scincomorpha; Lacertoidea;
OC   Lacertidae; Eremias.
OX   NCBI_TaxID=52179;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=97153826; PubMed=9000757;
RA   Macey J.R., Larson A., Ananjeva N.B., Fang Z., Papenfuss T.J.;
RT   "Two novel gene orders and the role of light-strand replication in
RT   rearrangement of the vertebrate mitochondrial genome.";
RL   Mol. Biol. Evol. 14:91-104(1997).
RN   [2]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=97153820; PubMed=9000751;
RA   Macey J.R., Larson A., Ananjeva N.B., Papenfuss T.J.;
RT   "Replication slippage may cause parallel evolution in the secondary
RT   structures of mitochondrial transfer RNAs.";
RL   Mol. Biol. Evol. 14:30-39(1997).
DR   EMBL; U71331; AAB48277.1; -.
KW   Mitochondrion.
FT   NON_TER      10     10
SQ   SEQUENCE   10 AA;  1288 MW;  5B3580C9D3640057 CRC64;

  Query Match             53.3%;  Score 24;  DB 8;  Length 10;
  Best Local Similarity   60.0%;  Pred. No. 7.5e+02;
  Matches    3;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 VRWHF 6
              :|| |
Db          4 IRWFF 8


RESULT 4
Q9TG41
ID   Q9TG41      PRELIMINARY;      PRT;    10 AA.
AC   Q9TG41;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Ophisaurus apodus.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Anguidae;
OC   Ophisaurus.
OX   NCBI_TaxID=102191;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=99343613; PubMed=10413621;
RA   Macey J.R., Schulte J.A. II, Larson A., Tuniyev B.S., Orlov N.,
RA   Papenfuss T.J.;
RT   "Molecular phylogenetics, tRNA evolution, and historical biogeography
RT   in anguid lizards and related taxonomic families.";
RL   Mol. Phylogenet. Evol. 12:250-272(1999).
DR   EMBL; AF085623; AAD51559.1; -.
KW   Mitochondrion.
FT   NON_TER      10     10
SQ   SEQUENCE   10 AA;  1239 MW;  1A3580C7336412C0 CRC64;

  Query Match             51.1%;  Score 23;  DB 8;  Length 10;
  Best Local Similarity   80.0%;  Pred. No. 1.1e+03;
  Matches    4;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 VRWHF 6
              ||| |
Db          4 VRWLF 8


RESULT 5
Q94VJ4
ID   Q94VJ4      PRELIMINARY;      PRT;     8 AA.
AC   Q94VJ4;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Varanus bengalensis nebulosis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OX   NCBI_TaxID=169827;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407492; AAL10031.1; -.
KW   Mitochondrion.
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1053 MW;  E8B5B9C733640056 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 8;
  Best Local Similarity   60.0%;  Pred. No. 8.3e+05;
  Matches    3;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 VRWHF 6
              :|| |
Db          2 IRWLF 6


RESULT 6
P79940
ID   P79940      PRELIMINARY;      PRT;     8 AA.
AC   P79940;
DT   01-MAY-1997 (TrEMBLrel. 03, Created)
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```
DT   01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   XMeis1-4 protein (Fragment).
OS   Xenopus laevis (African clawed frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
OC   Xenopodinae; Xenopus.
OX   NCBI_TaxID=8355;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=97202105; PubMed=9049632;
RA   Steelman S., Moskow J.J., Muzynski K., North C., Druck T.,
RA   Montgomery J.C., Huebner K., Daar I.O., Buchberg A.M.;
RT   "Identification of a conserved family of Meis1-related homeobox
RT   genes.";
RL   Genome Res. 7:142-156(1997).
DR   EMBL; U68389; AAB19199.1; -.
DR   TRANSFAC; T03410; -.
FT   NON_TER       1      1
SQ   SEQUENCE   8 AA;  1187 MW;  278B51F37B11F40B CRC64;

  Query Match             48.9%;  Score 22;  DB 13;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 WHF 6
              ||:
Db          5 WHY 7


RESULT 7
Q9B4X0
ID   Q9B4X0      PRELIMINARY;      PRT;    10 AA.
AC   Q9B4X0;
DT   01-JUN-2001 (TrEMBLrel. 17, Created)
DT   01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT   01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE   Cytochrome c oxidase subunit 1 (Fragment).
GN   COI.
OS   Notophthalmus viridescens (Eastern newt) (Triturus viridescens).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Caudata; Salamandroidea; Salamandridae;
OC   Notophthalmus.
OX   NCBI_TaxID=8316;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21175761; PubMed=11277635;
RA   Weisrock D.W., Macey J.R., Ugurtas I.H., Larson A., Papenfuss T.J.;
RT   "Molecular Phylogenetics and Historical Biogeography among
RT   Salamandrids of the 'True' Salamander Clade: Rapid Branching of
RT   Numerous Highly Divergent Lineages in Mertensiella luschani Associated
RT   with the Rise of Anatolia.";
RL   Mol. Phylogenet. Evol. 18:434-448(2001).
DR   EMBL; AF296616; AAK30305.1; -.
KW   Mitochondrion.
FT   NON_TER       10     10
SQ   SEQUENCE   10 AA;  1298 MW;  03D380C733640050 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 10;
  Best Local Similarity   60.0%;  Pred. No. 1.5e+03;
  Matches    3;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          2 VRWHF 6
              :|| |
Db          4 IRWLF 8


RESULT 8
Q958L2
ID   Q958L2      PRELIMINARY;      PRT;    10 AA.
AC   Q958L2;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Rana temporaria (European common frog).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=8407;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21184280; PubMed=11286498;
RA   Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.,
RA   Jennings M., Larson A.;
RT   "Molecular Phylogenetics of Western North American Frogs of the Rana
RT   boylii Species Group.";
RL   Mol. Phylogenet. Evol. 19:131-143(2001).
DR   EMBL; AF314018; AAK56874.1; -.
KW   Mitochondrion.
FT   NON_TER       10     10
SQ   SEQUENCE   10 AA;  1354 MW;  C0D380C9D36411A9 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              : || |
Db          3 FTRWFF 8


RESULT 9
Q958L8
ID   Q958L8      PRELIMINARY;      PRT;    10 AA.
AC   Q958L8;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Rana catesbeiana (Bull frog).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=8400;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21184280; PubMed=11286498;
RA   Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.,
RA   Jennings M., Larson A.;
RT   "Molecular Phylogenetics of Western North American Frogs of the Rana
RT   boylii Species Group.";
RL   Mol. Phylogenet. Evol. 19:131-143(2001).
DR   EMBL; AF314016; AAK56868.1; -.
KW   Mitochondrion.
FT   NON_TER       10     10
SQ   SEQUENCE   10 AA;  1354 MW;  C0D380C9D36411A9 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              : || |
Db          3 FTRWFF 8


RESULT 10
Q958K6
ID   Q958K6      PRELIMINARY;      PRT;    10 AA.
AC   Q958K6;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
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DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Rana pretiosa.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=69834;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21184280; PubMed=11286498;
RA   Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.,
RA   Jennings M., Larson A.;
RT   "Molecular Phylogenetics of Western North American Frogs of the Rana
RT   boylii Species Group.";
RL   Mol. Phylogenet. Evol. 19:131-143(2001).
DR   EMBL; AF314020; AAK56880.1; -.
KW   Mitochondrion.
FT   NON_TER      10     10
SQ   SEQUENCE   10 AA;  1354 MW;  C0D380C9D36411A9 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              : || |
Db          3 FTRWFF 8


RESULT 11
Q958K0
ID   Q958K0      PRELIMINARY;      PRT;    10 AA.
AC   Q958K0;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Rana cascadae.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=160497;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21184280; PubMed=11286498;
RA   Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.,
RA   Jennings M., Larson A.;
RT   "Molecular Phylogenetics of Western North American Frogs of the Rana
RT   boylii Species Group.";
RL   Mol. Phylogenet. Evol. 19:131-143(2001).
DR   EMBL; AF314022; AAK56886.1; -.
KW   Mitochondrion.
FT   NON_TER      10     10
SQ   SEQUENCE   10 AA;  1354 MW;  C0D380C9D36411A9 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              : || |
Db          3 FTRWFF 8


RESULT 12
Q958L5
ID   Q958L5      PRELIMINARY;      PRT;    10 AA.
AC   Q958L5;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Rana sylvatica (Wood frog).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=45438;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21184280; PubMed=11286498;
RA   Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.,
RA   Jennings M., Larson A.;
RT   "Molecular Phylogenetics of Western North American Frogs of the Rana
RT   boylii Species Group.";
RL   Mol. Phylogenet. Evol. 19:131-143(2001).
DR   EMBL; AF314017; AAK56871.1; -.
KW   Mitochondrion.
FT   NON_TER      10     10
SQ   SEQUENCE   10 AA;  1354 MW;  C0D380C9D36411A9 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              : || |
Db          3 FTRWFF 8


RESULT 13
Q958K3
ID   Q958K3      PRELIMINARY;      PRT;    10 AA.
AC   Q958K3;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Rana aurora (Red-legged frog).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=160496;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21184280; PubMed=11286498;
RA   Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.,
RA   Jennings M., Larson A.;
RT   "Molecular Phylogenetics of Western North American Frogs of the Rana
RT   boylii Species Group.";
RL   Mol. Phylogenet. Evol. 19:131-143(2001).
DR   EMBL; AF314021; AAK56883.1; -.
KW   Mitochondrion.
FT   NON_TER      10     10
SQ   SEQUENCE   10 AA;  1354 MW;  C0D380C9D36411A9 CRC64;

  Query Match             48.9%;  Score 22;  DB 8;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              : || |
Db          3 FTRWFF 8


RESULT 14
Q94NH4
ID   Q94NH4      PRELIMINARY;      PRT;    10 AA.
AC   Q94NH4;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
```

XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 86.7%; Score 39; DB 21; Length 6;
Best Local Similarity 100.0%; Pred. No. 9.3e+05;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRWH 5
|||||
Db 1 WVRWH 5

RESULT 5
AAB01508
ID AAB01508 standard; peptide; 6 AA.
XX
AC AAB01508;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 77.8%; Score 35; DB 21; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.3e+05;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 WVRWHF 6
|||| |
Db 1 WVRWAF 6

RESULT 6
AAB01499
ID AAB01499 standard; peptide; 6 AA.
XX
AC AAB01499;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 2
FT /note= "Any amino acid"
FT Misc-difference 3
FT /note= "Any amino acid"
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Claim 4; Page 9; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.

```
XX
SQ   Sequence   6 AA;

  Query Match             75.6%;  Score 34;  DB 21;  Length 6;
  Best Local Similarity   66.7%;  Pred. No. 9.3e+05;
  Matches    4;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              |  |||
Db          1 WXXWHF 6


RESULT 7
AAB01504
ID   AAB01504 standard; peptide; 6 AA.
XX
AC   AAB01504;
XX
DT   08-NOV-2000  (first entry)
XX
DE   Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW   DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW   activation; transcription; apoptosis; proliferative disorder;
KW   psoriasis; restenosis.
XX
OS   Synthetic.
XX
PN   WO200044771-A1.
XX
PD   03-AUG-2000.
XX
PF   26-JAN-2000; 2000WO-GB00227.
XX
PR   26-JAN-1999;   99GB-0001710.
XX
PA   (PROL-) PROLIFIX LTD.
XX
PI   Mueller R,  Kontermann RE,  Montigiani S;
XX
DR   WPI; 2000-532806/48.
XX
PT   Peptides binding to the DNA binding domain of transcription factor E2F
PT   and inhibiting cell cycle progression, useful for the treatment of
PT   cancer
XX
PS   Example; Page 26; 42pp; English.
XX
CC   Peptides which bind to the DNA binding domain of transcription
CC   factor E2F and inhibit cell cycle progression may be useful as
CC   research agents to investigate the interaction between E2F and DP-1,
CC   or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC   may also be used for inducing apoptosis and/or cell cycle arrest in
CC   a cell, particularly for treatment of cancer or other proliferative
CC   disorders such as psoriasis and restenosis.
XX
SQ   Sequence   6 AA;

  Query Match             75.6%;  Score 34;  DB 21;  Length 6;
  Best Local Similarity   100.0%;  Pred. No. 9.3e+05;
  Matches    5;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          2 VRWHF 6
              |||||
Db          2 VRWHF 6


RESULT 8
AAR60429
ID   AAR60429 standard; peptide; 8 AA.
XX
AC   AAR60429;
XX
DT   25-MAR-2003  (updated)
DT   30-MAR-1995  (first entry)
XX
DE   Antiproliferative peptide to transplantable human B-cell lymphoma.
XX
KW   antiproliferative; transplant; B-cell lymphoma line SUP-B8; Burkitt's;
KW   inhibit clonal expansion; induce apoptosis; anti-idiotype; IgM lambda;
KW   inhibit cell proliferation; peptidomimetics; cell surface receptor;
KW   immunoglobulin superfamily; treatment; neoplasia; identification;
KW   induce replication; therapy; clonal anergy; modulate tyrosine kinase.
XX
OS   Synthetic.
XX
PN   WO9418345-A1.
XX
PD   18-AUG-1994.
XX
PF   04-FEB-1994;   94WO-US01319.
XX
PR   05-FEB-1993;   93US-0014426.
PR   15-NOV-1993;   93US-0153341.
XX
PA   (AFFY-) AFFYMAX TECHNOLOGIES NV.
PA   (STRD ) UNIV LELAND STANFORD JUNIOR.
XX
PI   Bhatt RR,  Dower WJ,  Levy R,  Renschler MF;
XX
DR   WPI; 1994-279762/34.
XX
PT   Identifying anti-proliferative peptide(s) which specifically bind
PT   to immunoglobulin super-family species idiotype - esp. to inhibit
PT   B-cell lymphoma and leukocytic leukaemia cell proliferation, for
PT   anti-idiotype therapy
XX
PS   Claim 7; Page 45; 69pp; English.
XX
CC   AAR60400-73 are peptide ligands which bind to purified IgM lambda
CC   receptor of the human Burkitts's lymphoma cell line SUP-B8.Peptides
CC   AAR60414 to AAR60473 were biotinylated and linked to streptavidin.
CC   The peptides were identified with the use of filamentous phage
CC   libraries displaying random peptides. Corresponding synthetic
CC   peptides bound specifically to this Ig receptor, and blocked the
CC   binding of an anti-idiotype antibody. The ligands, when conjugated
CC   to form dimers or tetramers, induced cell death by apoptosis in
CC   vitro at nanomolar concentrations. This effect was associated with
CC   the specific stimulation of intracellular protein tyrosine
CC   phosphorylation. The peptides of the invention can be used individually,
CC   as complexes of cross-linked peptides or can be conjugated to deliver
CC   toxins or radionuclides to neoplastic cells bearing the specific Ig
CC   receptor.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence   8 AA;

  Query Match             75.6%;  Score 34;  DB 15;  Length 8;
  Best Local Similarity   80.0%;  Pred. No. 9.3e+05;
  Matches    4;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 WVRWH 5
              | |||
Db          3 WYRWH 7


RESULT 9
AAR60444
ID   AAR60444 standard; peptide; 8 AA.
XX
AC   AAR60444;
XX
DT   25-MAR-2003  (updated)
DT   30-MAR-1995  (first entry)
XX
DE   Antiproliferative peptide to transplantable human B-cell lymphoma.
```

XX
KW antiproliferative; transplant; B-cell lymphoma line SUP-B8; Burkitt's;
KW inhibit clonal expansion; induce apoptosis; anti-idiotype; IgM lambda;
KW inhibit cell proliferation; peptidomimetics; cell surface receptor;
KW immunoglobulin superfamily; treatment; neoplasia; identification;
KW induce replication; therapy; clonal anergy; modulate tyrosine kinase.
XX
OS Synthetic.
XX
PN WO9418345-A1.
XX
PD 18-AUG-1994.
XX
PF 04-FEB-1994; 94WO-US01319.
XX
PR 05-FEB-1993; 93US-0014426.
PR 15-NOV-1993; 93US-0153341.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
PA (STRD) UNIV LELAND STANFORD JUNIOR.
XX
PI Bhatt RR, Dower WJ, Levy R, Renschler MF;
XX
DR WPI; 1994-279762/34.
XX
PT Identifying anti-proliferative peptide(s) which specifically bind
PT to immunoglobulin super-family species idiotype - esp. to inhibit
PT B-cell lymphoma and leukocytic leukaemia cell proliferation, for
PT anti-idiotype therapy
XX
PS Claim 7; Page 45; 69pp; English.
XX
CC AAR60400-73 are peptide ligands which bind to purified IgM lambda
CC receptor of the human Burkitts's lymphoma cell line SUP-B8.Peptides
CC AAR60414 to AAR60473 were biotinylated and linked to streptavidin.
CC The peptides were identified with the use of filamentous phage
CC libraries displaying random peptides. Corresponding synthetic
CC peptides bound specifically to this Ig receptor, and blocked the
CC binding of an anti-idiotype antibody. The ligands, when conjugated
CC to form dimers or tetramers, induced cell death by apoptosis in
CC vitro at nanomolar concentrations. This effect was associated with
CC the specific stimulation of intracellular protein tyrosine
CC phosphorylation. The peptides of the invention can be used individually,
CC as complexes of cross-linked peptides or can be conjugated to deliver
CC toxins or radionuclides to neoplastic cells bearing the specific Ig
CC receptor.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 8 AA;

Query Match 75.6%; Score 34; DB 15; Length 8;
Best Local Similarity 80.0%; Pred. No. 9.3e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 WVRWH 5
| |||
Db 3 WYRWH 7

RESULT 10
AAR37389
ID AAR37389 standard; peptide; 6 AA.
XX
AC AAR37389;
XX
DT 07-JUL-1993 (first entry)
XX
DE Peptide for treating septic shock.
XX
KW Toxic shock; blood endotoxin removal; serum; diagnostic reagent;
KW cytokine release control; treatment; pertussis; bacterial meningitis;
KW HIV related infections; polymyxin B; Group II.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Region 1..3
FT /note= "repeat region"
FT Region 4..6
FT /note= "repeat region"
XX
PN ZA9200943-A.
XX
PD 25-NOV-1992.
XX
PF 10-FEB-1992; 92ZA-0000943.
XX
PR 11-FEB-1991; 91US-0658744.
XX
PA (PORR/) PORRO M.
XX
PI Porro M;
XX
DR WPI; 1993-094304/11.
XX
PT New peptide for treatment or prevention of toxic shock - comprises
PT specified sequences of aminoacid(s) and analogs
PT comprising sequences retro-orientated
XX
PS Example; Page 5; 39pp; English.
XX
CC The (Group II) peptide is an example of a generic peptide of formula
CC R-(Lys/Arg/His - Phe/Tyr/Trp - Leu/Ile/Val)n-R, where n = 1-100
CC and each R is H, an amino acid residue or a fatty acid residue.
CC The peptide is useful for treating or preventing septic shock,
CC mixing with polymyxin B to reduce its toxicity; removing
CC endotoxins fron blood, sera or other fluids (in vivo or in
CC vitro); controlling release of cytokines induced by endotoxins;
CC as diagnostic reagents to detect and quantify toxins in blood
CC or sera; preparing non-toxic antigenic complexes of lipid A or
CC lipopolysaccharide (LPS); and for treating pertussis, bacterial
CC meningitis and HIV-related infections. The usual dose is 10-100
CC ug/kg/day, given parenterally. It binds to the same sites as
CC polymyxin B, i.e. it inhibits all the toxic effects of lipid A. It
CC has no antibiotic activity; does not lyse erythrocytes; has no
CC toxicity in mice when injected at 50mg/kg and is relatively unstable
CC against proteases.
XX
SQ Sequence 6 AA;

Query Match 68.9%; Score 31; DB 14; Length 6;
Best Local Similarity 100.0%; Pred. No. 9.3e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
||||
Db 2 WVRW 5

RESULT 11
AAW28912
ID AAW28912 standard; peptide; 6 AA.
XX
AC AAW28912;
XX
DT 20-JAN-1998 (first entry)
XX
DE Opioid peptide.
XX
KW enkephalin; mu-opioid receptor ligand; agonist; antagonist.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "N-acetyl-Arg"

FT Modified-site 6
FT /note= "the C-terminal is in amide form"
XX
PN US5641861-A.
XX
PD 24-JUN-1997.
XX
PF 07-JUN-1995; 95US-0487006.
XX
PR 07-JUN-1995; 95US-0487006.
XX
PA (TORR-) TORREY PINES INST MOLECULAR STUDIES.
XX
PI Dooley CT, Houghten RA;
XX
DR WPI; 1997-340994/31.
XX
PT New opioid peptides which bind mu receptors specifically - have
PT agonist or antagonist activity and are used for study and
PT localisation of mu receptors and to treat peripheral side effects of
PT morphine etc.
XX
PS Disclosure; Column 8; 92pp; English.
XX
CC The patent discloses the following new peptides, which are opioids which
CC bind specifically to the mu receptor: Ac-Phe-Arg-Trp-Trp-Tyr-Xaa-NH2 (1);
CC Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 (2); Trp-Trp-Pro-Lys-His-Xaa-NH2 (3);
CC Trp-Trp-Pro-Xaa1-NH2 (4); Tyr-Pro-Phe-Gly-Phe-Xaa-NH2 (5);
CC D-Ile-D-Met-D-Ser-D-Trp-D-Trp-(Gly)n-Xaa2-NH2 (6);
CC D-Ile-D-Met-D-Thr-D-Trp-Gly-Xaa2-NH2 (7); Tyr-A1-B2-C3-NH2 (214);
CC Pm and red ((Me)x(H)y-Tyr-(NMe)z-Tyr-(Xaa3)z-NH2) (221); and
CC Trp-Trp-Pro-D4-(His)z-(Xaa)z-NH2 (222); where Xaa = any natural amino
CC acid; Xaa1 = Lys or Arg; n and z = 0 or 1; Xaa2 = Gly or the D form of
CC any naturally occurring amino acid; A1 = D-norvaline or D-norleucine;
CC B2 = Gly, Phe or Trp; C3 = Trp or naphthylalanine; x and y = 0-2, but
CC not over 2 in total; Xaa3 = Phe, DPhe or benzylamino; D4 = Lys or Arg;
CC Pm and red indicate permethylation and reduction of all CO in peptide
CC links to methylene. These new compounds are useful: (i) for in vitro
CC assay and study of opiate receptor subtypes, particularly mu receptors
CC in the brain; (ii) for in vivo localisation of receptor subtypes; and
CC (iii) therapeutically to block the peripheral effects (e.g. constipation
CC and pruritus) of centrally acting pain killers such as morphine.
CC They are very selective for the mu opioid receptor, over binding to the
CC delta and kappa receptor subtypes.
CC The present sequence is a specific example of a peptide (2).
XX
SQ Sequence 6 AA;

Query Match 68.9%; Score 31; DB 18; Length 6;
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 WVRWH 5
|: ||
Db 2 WIGWH 6

RESULT 12
AAR93770
ID AAR93770 standard; Protein; 6 AA.
XX
AC AAR93770;
XX
DT 23-SEP-1997 (first entry)
XX
DE New peptide which acts as mu-opioid receptor ligand.
XX
KW mu-receptor; opioid; opiate; agonist; antagonist; diagnosis;
KW analgesic.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers

FT Modified-site 1
FT /note= "N-acetyl-Arg"
FT Misc-difference 6
FT /note= "this residue is in C-terminal amide form"
XX
PN WO9640208-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US09321.
XX
PR 07-JUN-1995; 95US-0476438.
XX
PA (TORR-) TORREY PINES INST MOLECULAR STUDIES.
XX
PI Dooley CT, Houghten RA;
XX
DR WPI; 1997-051895/05.
XX
PT New mu opioid receptor binding ligand peptide(s) - useful for
PT in-vitro and in-vivo diagnosis, as analgesics, and for blocking
PT peripheral effects of centrally acting drugs, e.g. morphine
XX
PS Disclosure; Page 19; 57pp; English.
XX
CC The patent discloses eight new groups of opioid peptides which bind
CC to the mu-receptor to act as agonists or antagonists. The peptides
CC can be used for in-vitro assays to study opiate receptor subtypes
CC (especially the mu type) in brain or other tissue samples; and for
CC in-vivo diagnosis to localise opioid subtypes. The peptides are also
CC useful as drugs to treat pathologies associated with other compounds
CC which interact with the opioid receptor system. Therefore they can be
CC used in medicaments for treating pathologies associated with the mu
CC receptor and as analgesics. They can be used therapeutically to block
CC the peripheral effects of centrally acting pain killers, e.g. to
CC prevent side effects such as constipation and pruritis associated
CC with morphine. The present sequence represents a specific example
CC of one of the new groups of peptides, of formula
CC Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 where Xaa = a naturally occurring
CC amino acid.
XX
SQ Sequence 6 AA;

Query Match 68.9%; Score 31; DB 18; Length 6;
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 WVRWH 5
|: ||
Db 2 WIGWH 6

RESULT 13
AAY23019
ID AAY23019 standard; peptide; 6 AA.
XX
AC AAY23019;
XX
DT 23-AUG-1999 (first entry)
XX
DE Opioid peptide which inhibits binding of enkephalin.
XX
KW Opioid peptide; ligand binding; opioid receptor;
KW micro-selective opioid peptide; enkephalin; opioid receptor system;
KW blocking; peripheral effect; centrally acting pain killer; morphine.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "acetylated"
FT Modified-site 6
FT /note= "amidated"

XX
PN US5919897-A.
XX
PD 06-JUL-1999.
XX
PF 07-JUN-1995; 95US-0488659.
XX
PR 07-JUN-1995; 95US-0488659.
XX
PA (TORR-) TORREY PINES INST MOLECULAR STUDIES.
XX
PI Dooley CT, Houghten RA;
XX
DR WPI; 1999-394647/33.
XX
PT New opioid peptides useful for blocking the peripheral effects of
PT centrally acting pain killers such as morphine
XX
PS Example 1; Column 8; 92pp; English.
XX
CC The specification describes opioid peptides, in which each of the
CC N atoms in the peptide backbone between respective amino acids is
CC modified by permethylation, perallylation, perethylation, perbenzylation
CC and pernaphthylation. The peptides inhibit ligand binding to an opioid
CC receptor. Specifically, the peptides inhibit the micro-selective
CC opioid peptide enkephalin. The peptides can be used in vivo
CC diagnostically to localize opioid receptor subtypes. They can be used
CC to treat pathologies associated with other compounds which interact with
CC the opioid receptor system. The peptides are especially useful for
CC blocking the peripheral effects of centrally acting pain killers such
CC as morphine. AAY23005-Y23024 represent opioid peptides of the invention,
CC and are derived from the general sequence given in AAY23004.
XX
SQ Sequence 6 AA;

Query Match 68.9%; Score 31; DB 20; Length 6;
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 WVRWH 5
|: ||
Db 2 WIGWH 6

RESULT 14
AAB01507
ID AAB01507 standard; peptide; 6 AA.
XX
AC AAB01507;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 68.9%; Score 31; DB 21; Length 6;
Best Local Similarity 83.3%; Pred. No. 9.3e+05;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 WVRWHF 6
||| ||
Db 1 WVRAHF 6

RESULT 15
AAM45777
ID AAM45777 standard; Peptide; 7 AA.
XX
AC AAM45777;
XX
DT 25-OCT-2001 (first entry)
XX
DE H11 binding site consensus conforming peptide (CCP) #2048.
XX
KW Antigen-binding; tumour; diagnosis; stress protein-peptide complex; SPPC;
KW immunogenically cross-reactive; cancer; immunogenic cancer cell;
KW cytostatic; vaccine; tumour-specific immunogenic response inducer;
KW astrocytoma; fibrosarcoma; myxosarcoma; liposarcoma; oligodendroglioma;
KW ependymoma; medulloblastoma; primitive neural ectodermal tumour.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN CA2290722-A1.
XX
PD 08-JUN-2001.
XX
PF 08-DEC-1999; 99CA-2290722.
XX
PR 08-DEC-1999; 99CA-2290722.
XX
PA (NOVO-) NOVOPHARM BIOTECH INC.
XX
PI Kaplan HA, Maiti PK, Fast DG, Herman W, Dan MD, Lewis KE;
PI Entwistle JM, MacDonald GC;
XX
DR WPI; 2001-425937/46.
XX
PT Composition useful for treating and diagnosing cancer, comprises stress
PT protein-peptide complexes associated with tumor, and isolated
PT antigen-binding fragments of an antibody that binds specifically to the
PT complex -
XX
PS Example 4; Page 108; 154pp; English.
XX
CC The present invention describes a composition (I) comprising stress
CC protein-peptide complexes (SPPC) associated with tumours that is
CC specifically immunogenically cross-reactive with cell surface-associated
CC SPPCs specific to target cancer (TC). Also described is an isolated
CC antigen-binding fragment of an antibody that binds specifically to SPPCs
CC or a population of different SPPCs consisting of immunogenic cancer cell

CC surface-associated SPPC of TC. (I) has cytostatic activity and can be
CC used in vaccine production and as a tumour-specific immunogenic response
CC inducer. (I) is useful for treating 71 types of cancers or tumours in a
CC subject, such as astrocytoma, fibrosarcoma, myxosarcoma, liposarcoma,
CC oligodendroglioma, ependymoma, medulloblastoma, and primitive neural
CC ectodermal tumour (PNET). (I) is useful as cancer immunogen including
CC vaccines. (I) is useful for diagnostic and palliative use, for detecting
CC or imaging cancer cells, and to monitor the course of amelioration of
CC malignancy in an individual. AAM43707 to AAM47109 represent peptides
CC which are used in the exemplification of the present invention.
XX
SQ Sequence 7 AA;

Query Match 68.9%; Score 31; DB 22; Length 7;
Best Local Similarity 66.7%; Pred. No. 9.3e+05;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 WVRWHF 6
              | ||:|
Db          1 WRRWNF 6
```

RESULT 16
AAR86140
ID AAR86140 standard; peptide; 10 AA.
XX
AC AAR86140;
XX
DT 26-JUN-1996 (first entry)
XX
DE Anti-ELAM-1 binding peptide #117.
XX
KW Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; selectin;
KW receptor; leukocyte; vascular wall; endothelium; extravasation;
KW inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell.
XX
OS Synthetic.
XX
PN WO9531210-A1.
XX
PD 23-NOV-1995.
XX
PF 11-MAY-1995; 95WO-US06315.
XX
PR 11-MAY-1994; 94US-0241054.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Barrett RW, Cwirla SE, Dower WJ, Koller KJ, Lee J;
PI Martens CL, Ruhland-fritsch B;
XX
DR WPI; 1996-010687/01.
XX
PT New peptide(s) that bind to endothelial leukocyte adhesion molecule
PT 1 - useful for treating inflammation and other E-selectin mediated
PT diseases
XX
PS Disclosure; Page 17; 85pp; English.
XX
CC Peptides AAR86024-R86236 are examples of peptides and their mimetics
CC that bind to endothelial leukocyte adhesion molecule (ELAM)-1. This
CC molecule is a member of the selectin family of receptors and is involved
CC in binding of leukocytes to the vascular endothelial wall prior to
CC extravasation of the leukocyte, e.g . to a site of inflammation.
CC The peptides bind pref. to E-selectin but may also bind L- or
CC P-selectin, and can be used to treat conditions mediated by E-selectin,
CC e.g. inflammatory conditions. The peptides have strong affinity for the
CC selectin receptors and inhibit the binding of the sialyl Lewis (SLe-x)
CC part of cell surface glycoproteins to E-selectin. The peptide are
CC small, generally less than 2 kD, have an IC50 of up to 100 micromole
CC against binding of HL60 cells to ELAM-1, have one or more peptide
CC linkages replaced by CH2OC(O)NR, phosphonate, CH2SO2NR, CH2NR, CON(R6),
CC or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alkyl.
CC The peptides may also have substituted N- and C-termini e.g.
CC succinimido, N-benzyloxycarbonyl or N-lower alkyl cpds.
XX
SQ Sequence 10 AA;

Query Match 68.9%; Score 31; DB 17; Length 10;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 WVRW 4
              ||||
Db          6 WVRW 9
```

RESULT 17
AAR86145
ID AAR86145 standard; peptide; 10 AA.
XX
AC AAR86145;
XX
DT 26-JUN-1996 (first entry)
XX
DE Anti-ELAM-1 binding peptide #117.
XX
KW Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; selectin;
KW receptor; leukocyte; vascular wall; endothelium; extravasation;
KW inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 10
FT /note= "contain amidated C-terminus"
XX
PN WO9531210-A1.
XX
PD 23-NOV-1995.
XX
PF 11-MAY-1995; 95WO-US06315.
XX
PR 11-MAY-1994; 94US-0241054.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Barrett RW, Cwirla SE, Dower WJ, Koller KJ, Lee J;
PI Martens CL, Ruhland-fritsch B;
XX
DR WPI; 1996-010687/01.
XX
PT New peptide(s) that bind to endothelial leukocyte adhesion molecule
PT 1 - useful for treating inflammation and other E-selectin mediated
PT diseases
XX
PS Disclosure; Page 17; 85pp; English.
XX
CC Peptides AAR86024-R86236 are examples of peptides and their mimetics
CC that bind to endothelial leukocyte adhesion molecule (ELAM)-1. This
CC molecule is a member of the selectin family of receptors and is involved
CC in binding of leukocytes to the vascular endothelial wall prior to
CC extravasation of the leukocyte, e.g . to a site of inflammation.
CC The peptides bind pref. to E-selectin but may also bind L- or
CC P-selectin, and can be used to treat conditions mediated by E-selectin,
CC e.g. inflammatory conditions. The peptides have strong affinity for the
CC selectin receptors and inhibit the binding of the sialyl Lewis (SLe-x)
CC part of cell surface glycoproteins to E-selectin. The peptide are
CC small, generally less than 2 kD, have an IC50 of up to 100 micromole
CC against binding of HL60 cells to ELAM-1, have one or more peptide
CC linkages replaced by CH2OC(O)NR, phosphonate, CH2SO2NR, CH2NR, CON(R6),
CC or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alkyl.
CC The peptides may also have substituted N- and C-termini e.g.
CC succinimido, N-benzyloxycarbonyl or N-lower alkyl cpds.
XX
SQ Sequence 10 AA;

```
  Query Match             68.9%;  Score 31;  DB 17;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              ||||
Db          6 WVRW 9
```

```
RESULT 18
AAR86146
ID   AAR86146 standard; peptide; 10 AA.
XX
AC   AAR86146;
XX
DT   26-JUN-1996  (first entry)
XX
DE   Anti-ELAM-1 binding peptide #123.
XX
KW   Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; selectin;
KW   receptor; leukocyte; vascular wall; endothelium; extravasation;
KW   inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell.
XX
OS   Synthetic.
XX
PN   WO9531210-A1.
XX
PD   23-NOV-1995.
XX
PF   11-MAY-1995;   95WO-US06315.
XX
PR   11-MAY-1994;   94US-0241054.
XX
PA   (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI   Barrett RW,  Cwirla SE,  Dower WJ,  Koller KJ,  Lee J;
PI   Martens CL, Ruhland-fritsch B;
XX
DR   WPI; 1996-010687/01.
XX
PT   New peptide(s) that bind to endothelial leukocyte adhesion molecule
PT   1 - useful for treating inflammation and other E-selectin mediated
PT   diseases
XX
PS   Disclosure; Page 17; 85pp; English.
XX
CC   Peptides AAR86024-R86236 are examples of peptides and their mimetics
CC   that bind to endothelial leukocyte adhesion molecule (ELAM)-1.  This
CC   molecule is a member of the selectin family of receptors and is involved
CC   in binding of leukocytes to the vascular endothelial wall prior to
CC   extravasation of the leukocyte, e.g . to a site of inflammation.
CC   The peptides bind pref. to E-selectin but may also bind L- or
CC   P-selectin, and can be used to treat conditions mediated by E-selectin,
CC   e.g. inflammatory conditions.  The peptides have strong affinity for the
CC   selectin receptors and inhibit the binding of the sialyl Lewis (SLe-x)
CC   part of cell surface glycoproteins to E-selectin.  The peptide are
CC   small, generally less than 2 kD, have an IC50 of up to 100 micromole
CC   against binding of HL60 cells to ELAM-1, have one or more peptide
CC   linkages replaced by CH2OC(O)NR, phosphonate, CH2SO2NR, CH2NR, CON(R6),
CC   or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alkyl.
CC   The peptides may also have substituted N- and C-termini e.g.
CC   succinimido, N-benzyloxycarbonyl or N-lower alkyl cpds.
XX
SQ   Sequence   10 AA;
```

```
  Query Match             68.9%;  Score 31;  DB 17;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              ||||
Db          6 WVRW 9
```

```
RESULT 19
AAW63963
ID   AAW63963 standard; peptide; 10 AA.
XX
AC   AAW63963;
XX
DT   25-MAR-2003  (updated)
DT   02-OCT-1998  (first entry)
XX
DE   ELAM-1 peptide mimetic #118.
XX
KW   Endothelial leukocyte adhesion molecule 1; ELAM-1; inflammation;
KW   selectin; diagnosis; mimetic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   10
FT                   /note= "C-terminal Met is amidated"
XX
PN   US5728802-A.
XX
PD   17-MAR-1998.
XX
PF   12-MAY-1995;   95US-0439817.
XX
PR   12-MAY-1995;   95US-0439817.
PR   06-MAY-1992;   92US-0881395.
PR   05-MAY-1993;   93US-0057295.
PR   11-MAY-1994;   94US-0241054.
XX
PA   (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI   Barrett RW,  Cwirla SE,  Dower WJ,  Koller KJ,  Lee J;
PI   Martens CL,  Ruhland B;
XX
DR   WPI; 1998-249882/22.
XX
PT   Peptide(s) or their mimetic(s) that bind to E-selectin - useful for,
PT   e.g. treating conditions mediated by E-selectin such as inflammatory
PT   condition(s)
XX
PS   Example 2; Column 93-94; 84pp; English.
XX
CC   AAW63846-W64054 are peptides and peptide mimetics that bind selectins
CC   including endothelial leukocyte adhesion molecule 1 (ELAM-1) and can be
CC   used for blocking adhesion of leukocytes to the selectins. The peptides
CC   have applications for the treatment of conditions mediated by
CC   E-selectin, e.g. inflammatory conditions. They can also be used for
CC   diagnostic purposes, e.g. for identifying the vascular site of E-selectin
CC   in vivo or can be coupled to anti-inflammatory or other drugs.
CC   (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence   10 AA;
```

```
  Query Match             68.9%;  Score 31;  DB 19;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              ||||
Db          6 WVRW 9
```

```
RESULT 20
AAW63964
ID   AAW63964 standard; peptide; 10 AA.
XX
AC   AAW63964;
XX
DT   25-MAR-2003  (updated)
```

DT 02-OCT-1998 (first entry)
XX
DE ELAM-1 peptide mimetic #119.
XX
KW Endothelial leukocyte adhesion molecule 1; ELAM-1; inflammation;
KW selectin; diagnosis; mimetic.
XX
OS Synthetic.
XX
PN US5728802-A.
XX
PD 17-MAR-1998.
XX
PF 12-MAY-1995; 95US-0439817.
XX
PR 12-MAY-1995; 95US-0439817.
PR 06-MAY-1992; 92US-0881395.
PR 05-MAY-1993; 93US-0057295.
PR 11-MAY-1994; 94US-0241054.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Barrett RW, Cwirla SE, Dower WJ, Koller KJ, Lee J;
PI Martens CL, Ruhland B;
XX
DR WPI; 1998-249882/22.
XX
PT Peptide(s) or their mimetic(s) that bind to E-selectin - useful for,
PT e.g. treating conditions mediated by E-selectin such as inflammatory
PT condition(s)
XX
PS Example 2; Column 93-94; 84pp; English.
XX
CC AAW63846-W64054 are peptides and peptide mimetics that bind selectins
CC including endothelial leukocyte adhesion molecule 1 (ELAM-1) and can be
CC used for blocking adhesion of leukocytes to the selectins. The peptides
CC have applications for the treatment of conditions mediated by
CC E-selectin, e.g. inflammatory conditions. They can also be used for
CC diagnostic purposes, e.g. for identifying the vascular site of E-selectin
CC in vivo or can be coupled to anti-inflammatory or other drugs.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 10 AA;

Query Match 68.9%; Score 31; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
||||
Db 6 WVRW 9

RESULT 21
AAW63958
ID AAW63958 standard; peptide; 10 AA.
XX
AC AAW63958;
XX
DT 25-MAR-2003 (updated)
DT 02-OCT-1998 (first entry)
XX
DE ELAM-1 peptide mimetic #113.
XX
KW Endothelial leukocyte adhesion molecule 1; ELAM-1; inflammation;
KW selectin; diagnosis; mimetic.
XX
OS Synthetic.
XX
PN US5728802-A.
XX
PD 17-MAR-1998.
XX
PF 12-MAY-1995; 95US-0439817.
XX
PR 12-MAY-1995; 95US-0439817.
PR 06-MAY-1992; 92US-0881395.
PR 05-MAY-1993; 93US-0057295.
PR 11-MAY-1994; 94US-0241054.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Barrett RW, Cwirla SE, Dower WJ, Koller KJ, Lee J;
PI Martens CL, Ruhland B;
XX
DR WPI; 1998-249882/22.
XX
PT Peptide(s) or their mimetic(s) that bind to E-selectin - useful for,
PT e.g. treating conditions mediated by E-selectin such as inflammatory
PT condition(s)
XX
PS Example 2; Column 91-92; 84pp; English.
XX
CC AAW63846-W64054 are peptides and peptide mimetics that bind selectins
CC including endothelial leukocyte adhesion molecule 1 (ELAM-1) and can be
CC used for blocking adhesion of leukocytes to the selectins. The peptides
CC have applications for the treatment of conditions mediated by
CC E-selectin, e.g. inflammatory conditions. They can also be used for
CC diagnostic purposes, e.g. for identifying the vascular site of E-selectin
CC in vivo or can be coupled to anti-inflammatory or other drugs.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 10 AA;

Query Match 68.9%; Score 31; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
||||
Db 6 WVRW 9

RESULT 22
AAR37390
ID AAR37390 standard; peptide; 6 AA.
XX
AC AAR37390;
XX
DT 07-JUL-1993 (first entry)
XX
DE Peptide for treating septic shock.
XX
KW Toxic shock; blood endotoxin removal; serum; diagnostic reagent;
KW cytokine release control; treatment; pertussis; bacterial meningitis;
KW HIV related infections; polymyxin B; Group II.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Region 1..3
FT /note= "repeat region"
FT Region 4..6
FT /note= "repeat region"
XX
PN ZA9200943-A.
XX
PD 25-NOV-1992.
XX
PF 10-FEB-1992; 92ZA-0000943.
XX
PR 11-FEB-1991; 91US-0658744.
XX
PA (PORR/) PORRO M.
XX
PI Porro M;

XX
DR WPI; 1993-094304/11.
XX
PT New peptide for treatment or prevention of toxic shock - comprises
PT specified sequences of aminoacid(s) and analogs
PT comprising sequences retro-orientated
XX
PS Example; Page 5; 39pp; English.
XX
CC The (Group II) peptide is an example of a generic peptide of formula
CC R-(Lys/Arg/His - Phe/Tyr/Trp - Leu/Ile/Val)n-R, where n = 1-100
CC and each R is H, an amino acid residue or a fatty acid residue.
CC The peptide is useful for treating or preventing septic shock,
CC mixing with polymyxin B to reduce its toxicity; removing
CC endotoxins fron blood, sera or other fluids (in vivo or in
CC vitro); controlling release of cytokines induced by endotoxins;
CC as diagnostic reagents to detect and quantify toxins in blood
CC or sera; preparing non-toxic antigenic complexes of lipid A or
CC lipopolysaccharide (LPS); and for treating pertussis, bacterial
CC meningitis and HIV-related infections. The usual dose is 10-100
CC ug/kg/day, given parenterally. It binds to the same sites as
CC polymyxin B, i.e. it inhibits all the toxic effects of lipid A. It
CC has no antibiotic activity; does not lyse erythrocytes; has no
CC toxicity in mice when injected at 50mg/kg and is relatively unstable
CC against proteases.
XX
SQ Sequence 6 AA;

Query Match 66.7%; Score 30; DB 14; Length 6;
Best Local Similarity 75.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
|:||
Db 2 WIRW 5

RESULT 23
AAW66066
ID AAW66066 standard; peptide; 6 AA.
XX
AC AAW66066;
XX
DT 16-NOV-1998 (first entry)
XX
DE Peptide useful as somatostatin antagonist.
XX
KW somatostatin antagonist; growth hormone; insulin; glucagon; diabetes;
KW growth promoter; gastric enzyme; eating disorder; disulphide.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..6
FT /note= "D-form residues"
XX
PN EP863156-A1.
XX
PD 09-SEP-1998.
XX
PF 05-MAR-1998; 98EP-0301654.
XX
PR 06-MAR-1997; 97US-0812724.
XX
PA (AMCY) AMERICAN CYANAMID CO.
XX
PI Baumbach WR, Houghten RA;
XX
DR WPI; 1998-458800/40.
XX
PT New somatostatin antagonist peptide(s) - useful as animal growth
PT promoters
XX
PS Example 3; Page 10; 37pp; English.
XX
CC The invention relates to somatostatin antagonists that can be used to
CC promote the growth of meat-producing animals by decreasing the effect of
CC somatostatin and/or increasing the release of growth hormone, insulin,
CC glucagon and/or gastric enzymes and/or enhancing immune function. Pure
CC somatostatin antagonists may also be useful for treating human or animal
CC disorders where reversal of somatostatin activity is beneficial, e.g.
CC gastrointestinal or eating disorders, diabetes or brain dysfunction. The
CC present sequence represents a somatostatin antagonist.
XX
SQ Sequence 6 AA;

Query Match 66.7%; Score 30; DB 19; Length 6;
Best Local Similarity 75.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
|:||
Db 2 WIRW 5

RESULT 24
AAY24292
ID AAY24292 standard; peptide; 6 AA.
XX
AC AAY24292;
XX
DT 15-SEP-1999 (first entry)
XX
DE Somatostatin antagonist peptide from US5925618 Example 3.
XX
KW Somatostatin antagonist; growth hormone; insulin; glucagon; gastric;
KW enzyme; immune function; cyclic peptide; gastrointestinal disorder;
KW eating disorder; diabetes; brain dysfunction.
XX
OS Synthetic.
XX
PN US5925618-A.
XX
PD 20-JUL-1999.
XX
PF 03-MAR-1998; 98US-0033395.
XX
PR 06-MAR-1997; 97US-0035181.
PR 03-MAR-1998; 98US-0033395.
XX
PA (AMCY) AMERICAN CYANAMID CO.
XX
PI Baumbach WR, Houghten RA;
XX
DR WPI; 1999-429054/36.
XX
PT New peptides, used to treat gastrointestinal and eating disorders,
PT diabetes, and brain dysfunction
XX
PS Example 3; Column 10; 15pp; English.
XX
CC The present invention describes linear and cyclic peptides, which
CC decrease the effect of somatostatin. The somatostatin antagonist
CC peptides are used for decreasing the effect of somatostatin, by
CC contacting a somatostatin receptor site. They are also used for
CC increasing the release of insulin, increasing the release of glucagon,
CC enhancing the growth of animals and enhancing immune function. They can
CC be used to treat gastrointestinal and eating disorders, diabetes and
CC brain dysfunction, and also to increase growth in meat producing
CC animals. The peptides demonstrate inverse agonist activity. This allows
CC them to act as pure somatostatin antagonists, while blocking intrinsic
CC somatostatin receptor activity, independent of endogenous somatostatin.
CC AAY24253 to AAY24304 represent peptides used in the exemplification of
CC the present invention.
XX
SQ Sequence 6 AA;

Query Match 66.7%; Score 30; DB 20; Length 6;
Best Local Similarity 75.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 WVRW 4
              |:||
Db          2 WIRW 5
```

RESULT 25
ABR45592
ID ABR45592 standard; Peptide; 6 AA.
XX
AC ABR45592;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #782.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 66.7%; Score 30; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 WVRWHF 6
              |: |:|
Db          1 WIFWYF 6
```

RESULT 26
AAY08189
ID AAY08189 standard; peptide; 8 AA.
XX
AC AAY08189;
XX
DT 09-JUL-1999 (first entry)
XX
DE Clotting factor VIII binding peptide 71.
XX
KW Coagulation factor VIII; clotting factor VIII; diagnosis; treatment;
KW purification; disorder; blood coagulation.
XX
OS Synthetic.
XX
PN WO9914232-A1.
XX
PD 25-MAR-1999.
XX
PF 12-SEP-1998; 98WO-EP05822.
XX
PR 13-SEP-1997; 97DE-1040310.
XX
PA (OCTA-) OCTAPHARMA AG.
XX
PI Jungbauer A;
XX
DR WPI; 1999-312410/26.
XX
PT Peptides with affinity for blood clotting factor 8
XX
PS Claim 4; Page 38; 51pp; German.
XX
CC This invention describes novel peptides (AAY08119-Y08212) with affinity
CC for coagulation factor VIII which can be used for for labeling,
CC identification (diagnostic) and purification of factor VIII. Some are
CC specific for one of natural and recombinant factor VIII, others are
CC reactive with both forms. Factor VIII is used to treat disorders of
CC blood coagulation. Using relatively small peptides, rather than large
CC antibody molecules generally used, simplifies purification of factor
CC VIII. The peptides are of formula R1-X-R2 where R1 = amino or a
CC peptide; R2 = carboxy or a peptide and X = a peptide of at least 3,
CC preferably 7-12, amino acid residues.
XX
SQ Sequence 8 AA;

Query Match 66.7%; Score 30; DB 20; Length 8;
Best Local Similarity 33.3%; Pred. No. 9.3e+05;
Matches 2; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 WVRWHF 6
              |::| :
Db          2 WIKWEY 7
```

RESULT 27
AAW80380
ID AAW80380 standard; Peptide; 12 AA.
XX
AC AAW80380;
XX
DT 14-JAN-1999 (first entry)
XX
DE Peptide eluted after biopanning against maltose binding protein.
XX
KW Intervening protein sequence; IVPS; protein splicing;
KW protein production; maltose binding protein.
XX
OS Synthetic.
XX
PN US5834247-A.

XX
PD 10-NOV-1998.
XX
PF 05-MAR-1997; 97US-0811492.
XX
PR 05-MAR-1997; 97US-0811492.
PR 09-DEC-1992; 92US-0004139.
PR 03-NOV-1993; 93US-0146885.
PR 28-JUN-1995; 95US-0496247.
PR 29-DEC-1995; 95US-0580555.
XX
PA (NEWE) NEW ENGLAND BIOLABS INC.
XX
PI Adam E, Chong SSC, Comb DG, Hodges RA, Jack WE;
PI Noren CJ, Perler FB, Southworth M, Xu M;
XX
DR WPI; 1999-008713/01.
XX
PT New modified target proteins - which have controllable intervening
PT protein sequence which can facilitate production, purification,
PT labelling or isolation of target proteins
XX
PS Example 22; Fig 36; 123pp; English.
XX
CC AAW80372-93 represent peptides eluted after biopanning against
CC maltose binding protein, in the course of the invention. The
CC specification describes IVPS (intervening protein sequence)
CC regions which encode peptides which are removed via protein
CC splicing to form the native protein. The specification describes
CC a modified protein comprising a target protein or portion, fused
CC either internally or terminally, to a IVPS, or to an amino- or
CC carboxyl-terminal element of a IVPS. The IVPS are capable of
CC excision from or cleavage of the modified protein upon predetermined
CC conditions, in cis or trans, e.g. temparature increase, deglycosylation,
CC unblocking of amino acid residues, treatment with chemical reagents.
CC The methods can be used for modifying, producing, purifying, labelling
CC or isolating target proteins such as enzymes, toxins, cytokines,
CC glycoproteins and growth factors.
XX
SQ Sequence 12 AA;

Query Match 66.7%; Score 30; DB 20; Length 12;
Best Local Similarity 100.0%; Pred. No. 97;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 RWHF 6
||||
Db 7 RWHF 10

RESULT 28
ABB74383
ID ABB74383 standard; Peptide; 14 AA.
XX
AC ABB74383;
XX
DT 18-APR-2002 (first entry)
XX
DE Karyophilic peptide SEQ ID NO:147.
XX
KW Fusogenic; nuclear localisation signal; NLS; encapsulation; lipogene;
KW liposome; micelle; karyophilic; cytostatic; antitumour; solid tumour;
KW peptide-lipid-polynucleotide complex; neoplastic disease; gene therapy;
KW breast carcinoma; prostate carcinoma.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200193836-A2.
XX
PD 13-DEC-2001.
XX
PF 08-JUN-2001; 2001WO-US18657.
XX
PR 09-JUN-2000; 2000US-210925P.
XX
PA (BOUL/) BOULIKAS T.
XX
PI Boulikas T;
XX
DR WPI; 2002-164295/21.
XX
PT Encapsulation of plasmid DNA (Lipogenes) and therapeutic agents with
PT nuclear localization signal/fusogenic peptide conjugates into targeted
PT liposome complexes -
XX
PS Claim 14; Page 63; 107pp; English.
XX
CC The present invention describes a method for producing micelles with
CC entrapped therapeutic agents. The method comprises: (1) combining
CC negatively charged agent with a cationic lipid in a ratio where 30-90 %
CC of the negatively charged atoms are neutralised by positive charges on
CC lipid molecules to form an electrostatic micelle complex in 20-80 %
CC ethanol; and (2) combining the micelle complex of (a) with fusogenic-
CC karyophilic peptide conjugates in a 0.0-0.3 ratio, therefore producing
CC micelles with entrapped therapeutic agents. Also described is a method
CC for delivering a therapeutic agent in vivo, comprising the administration
CC of the micelle. ABB74256 to ABB74858 represent specifically claimed
CC nuclear localisation signal (NLS) peptides for use in the method as the
CC fusogenic-karyophilic peptides. The micelles produced can have cytostatic
CC and antitumour activities. The peptide-lipid-polynucleotide complexes
CC produced are useful for inhibiting the progression of neoplastic
CC diseases. The invention relates to the field of gene therapy and is
CC directed toward methods for producing peptide-lipid-polynucleotide
CC complexes suitable for delivery of polynucleotides. The encapsulated
CC molecules display therapeutic efficacy in eradicating solid tumours
CC including but not limited to breast carcinoma or prostate carcinoma.
CC ABB74235 to ABB74255 are used in the exemplification of the present
CC invention.
XX
SQ Sequence 14 AA;

Query Match 66.7%; Score 30; DB 23; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 RWHF 6
||||
Db 10 RWHF 13

RESULT 29
AAB49729
ID AAB49729 standard; peptide; 7 AA.
XX
AC AAB49729;
XX
DT 10-APR-2001 (first entry)
XX
DE Peptide SEQ ID 40 which binds to the TADG5 protein.
XX
KW TADG5; human; zinc finger; SH3 domain; cell signalling;
KW cell cycle control.
XX
OS Unidentified.
XX
PN WO200102432-A1.
XX
PD 11-JAN-2001.
XX
PF 30-JUN-2000; 2000WO-US18304.
XX
PR 01-JUL-1999; 99US-0346510.
XX
PA (UYAR-) UNIV ARKANSAS.
XX
PI O'Brien TJ, Wang Y;

XX
DR WPI; 2001-123102/13.
XX
PT Novel SH3 domain-containing TADG5 protein useful for regulating gene
PT replication, as a nutrition supplement, and as a marker for human
PT tissue, or in cell cycle control -
XX
PS Example 6; Page 36; 85pp; English.
XX
CC This invention relates to an SH3 domain-containing protein termed TADG5,
CC and its variants. The invention includes amino acid and polynucleotide
CC sequences for TADG5, and oligonucleotides which bind to either the basic
CC amino acid region and/or the zinc finger motif of the TADG5 protein. The
CC basic amino acid region or zinc finger motif of TADG5 is useful for
CC regulating the expression of the TADG5 gene in a cell. The TADG5 protein
CC is useful as a source of amino acids, as a nutrition supplement, and as a
CC marker for human tissue, or in cell cycle control. TADG5 protein or
CC peptides generated from the protein sequence are useful as antigens for
CC the production of polyclonal and monoclonal antibodies. DNA encoding
CC TADG5 is useful as an antisense vehicle for cell cycle control by
CC shutting down signalling or cell division. The present sequence
CC represents a peptide identified from a phage display peptide library
CC through biopanning with the TADG5 protein.
XX
SQ Sequence 7 AA;

Query Match 64.4%; Score 29; DB 22; Length 7;
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 WVRWH 5
              |: ||
Db          3 WMDWH 7
```

RESULT 30
ABB90493
ID ABB90493 standard; Peptide; 8 AA.
XX
AC ABB90493;
XX
DT 27-MAY-2002 (first entry)
XX
DE Hominidae LDL receptor related peptide sequence #139.
XX
KW Hominidae; low density lipoprotein receptor; LDL receptor; LDL-R;
KW detection; lipid metabolic error; hyperlipaemia; mutation;
KW arteriosclerosis; ischaemic heart disease; ischaemia.
XX
OS Hominidae.
OS Synthetic.
XX
PN WO200206467-A1.
XX
PD 24-JAN-2002.
XX
PF 17-JUL-2001; 2001WO-JP06153.
XX
PR 18-JUL-2000; 2000JP-0218039.
XX
PA (BMLB-) BML INC.
XX
PI Hattori H, Tsuji M, Okada T, Nagano M, Egashira T, Ishihara M;
PI Iwasaki T;
XX
DR WPI; 2002-179794/23.
XX
PT Set of specific low density lipoprotein receptor gene mutations for
PT diagnosis of familial lipid metabolism errors including hyperlipemia -
XX
PS Example; Fig 50; 123pp; Japanese.
XX
CC The present invention describes a method for detecting lipid metabolism
CC errors in patients using as indicators a set of 65 specific low density
CC lipoprotein (LDL) receptor gene mutations. The method can be used in the
CC diagnosis of an inherited predisposition to the development of diseases
CC associated with hyperlipaemia, such as arteriosclerosis and ischaemic
CC heart disease. ABL91141 encodes the LDL receptor given in ABB90525.
CC ABL91142 to ABL91183 represent PCR primers used in the amplification of
CC the receptor gene. ABL90990 to ABL91140 and ABB90445 to ABB90524
CC represents sequences used in the exemplification of the present
CC invention.
XX
SQ Sequence 8 AA;

Query Match 64.4%; Score 29; DB 23; Length 8;
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 WVRWH 5
              | :||
Db          2 WPQWH 6
```

RESULT 31
AAR33522
ID AAR33522 standard; peptide; 6 AA.
XX
AC AAR33522;
XX
DT 07-JUL-1993 (first entry)
XX
DE Peptide for treating septic shock.
XX
KW Toxic shock; blood endotoxin removal; serum; diagnostic reagent;
KW cytokine release control; treatment; pertussis; bacterial meningitis;
KW HIV related infections; polymyxin B; Group I.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Region 1..3
FT /note= "repeat region"
FT Region 4..6
FT /note= "repeat region"
XX
PN ZA9200943-A.
XX
PD 25-NOV-1992.
XX
PF 10-FEB-1992; 92ZA-0000943.
XX
PR 11-FEB-1991; 91US-0658744.
XX
PA (PORR/) PORRO M.
XX
PI Porro M;
XX
DR WPI; 1993-094304/11.
XX
PT New peptide for treatment or prevention of toxic shock - comprises
PT specified sequences of aminoacid(s) and analogs
PT comprising sequences retro-orientated
XX
PS Example; Page 5; 39pp; English.
XX
CC The (Group I) peptide is an example of a generic peptide of formula
CC R-(Lys/Arg/His - Phe/Tyr/Trp - Leu/Ile/Val)n-R, where n = 1-100
CC and each R is H, an amino acid residue or a fatty acid residue.
CC The peptide is useful for treating or preventing septic shock,
CC mixing with polymyxin B to reduce its toxicity; removing
CC endotoxins fron blood, sera or other fluids (in vivo or in
CC vitro); controlling release of cytokines induced by endotoxins;
CC as diagnostic reagents to detect and quantify toxins in blood
CC or sera; preparing non-toxic antigenic complexes of lipid A or
CC lipopolysaccharide (LPS); and for treating pertussis, bacterial

CC meningitis and HIV-related infections. The usual dose is 10-100
CC ug/kg/day, given parenterally. It binds to the same sites as
CC polymyxin B, i.e. it inhibits all the toxic effects of lipid A. It
CC has no antibiotic activity; does not lyse erythrocytes; has no
CC toxicity in mice when injected at 50mg/kg and is relatively unstable
CC against proteases.
XX
SQ Sequence 6 AA;

Query Match 62.2%; Score 28; DB 14; Length 6;
Best Local Similarity 75.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
||:|
Db 2 WVKW 5

RESULT 32
AAR37388
ID AAR37388 standard; peptide; 6 AA.
XX
AC AAR37388;
XX
DT 07-JUL-1993 (first entry)
XX
DE Peptide for treating septic shock.
XX
KW Toxic shock; blood endotoxin removal; serum; diagnostic reagent;
KW cytokine release control; treatment; pertussis; bacterial meningitis;
KW HIV related infections; polymyxin B; Group II.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Region 1..3
FT /note= "repeat region"
FT Region 4..6
FT /note= "repeat region"
XX
PN ZA9200943-A.
XX
PD 25-NOV-1992.
XX
PF 10-FEB-1992; 92ZA-0000943.
XX
PR 11-FEB-1991; 91US-0658744.
XX
PA (PORR/) PORRO M.
XX
PI Porro M;
XX
DR WPI; 1993-094304/11.
XX
PT New peptide for treatment or prevention of toxic shock - comprises
PT specified sequences of aminoacid(s) and analogs
PT comprising sequences retro-orientated
XX
PS Example; Page 5; 39pp; English.
XX
CC The (Group II) peptide is an example of a generic peptide of formula
CC R-(Lys/Arg/His - Phe/Tyr/Trp - Leu/Ile/Val)n-R, where n = 1-100
CC and each R is H, an amino acid residue or a fatty acid residue.
CC The peptide is useful for treating or preventing septic shock,
CC mixing with polymyxin B to reduce its toxicity; removing
CC endotoxins fron blood, sera or other fluids (in vivo or in
CC vitro); controlling release of cytokines induced by endotoxins;
CC as diagnostic reagents to detect and quantify toxins in blood
CC or sera; preparing non-toxic antigenic complexes of lipid A or
CC lipopolysaccharide (LPS); and for treating pertussis, bacterial
CC meningitis and HIV-related infections. The usual dose is 10-100
CC ug/kg/day, given parenterally. It binds to the same sites as
CC polymyxin B, i.e. it inhibits all the toxic effects of lipid A. It
CC has no antibiotic activity; does not lyse erythrocytes; has no
CC toxicity in mice when injected at 50mg/kg and is relatively unstable
CC against proteases.
XX
SQ Sequence 6 AA;

Query Match 62.2%; Score 28; DB 14; Length 6;
Best Local Similarity 75.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
|:||
Db 2 WLRW 5

RESULT 33
AAR93719
ID AAR93719 standard; peptide; 6 AA.
XX
AC AAR93719;
XX
DT 10-MAY-1996 (first entry)
XX
DE Cyclo[-Tyr-trp-Leu-Arg-Trp-Pro-].
XX
KW neurokinin A antagonist; tachykinin; respiratory disease; asthma;
KW analgesic; cyclic.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "not an N-terminal amino acid, but condensed
FT with Pro(6) to form a cyclic peptide"
FT Misc-difference 2
FT /note= "D-form residue"
FT Modified-site 6
FT /note= "not a C-terminal amino acid, but condensed
FT with Tyr(1) to form a cyclic peptide"
XX
PN WO9521187-A1.
XX
PD 10-AUG-1995.
XX
PF 10-JAN-1995; 95WO-US00296.
XX
PR 03-FEB-1994; 94US-0191571.
XX
PA (RICH) MERRELL DOW PHARM INC.
XX
PI Buck SH, Harbeson SL, Kudlacz EM, Owen TJ;
XX
DR WPI; 1995-336695/43.
XX
PT New cyclic peptide derivs. - are neurokinin A and tachykinin
PT antagonists useful e.g. for treating asthma or as analgesics
XX
PS Claims 25, 33; Pages 74, 76; 82pp; English.
XX
CC The patent describes novel cyclic hexapeptide and octapeptide compounds
CC which are antagonists of neurokinin A and which are useful medically as
CC analgesics and for treating respiratory diseases such as asthma. The
CC patent also discloses the new use of a broader range of cyclic
CC hexapeptides as analgesics and for treating respiratory diseases such
CC as asthma. The present sequence represents a specifically preferred
CC example of the broader peptides.
XX
SQ Sequence 6 AA;

Query Match 62.2%; Score 28; DB 16; Length 6;
Best Local Similarity 75.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 WVRW 4
              |:||
Db          2 WLRW 5


RESULT 34
AAR93706
ID   AAR93706 standard; peptide; 6 AA.
XX
AC   AAR93706;
XX
DT   10-MAY-1996  (first entry)
XX
DE   Cyclo[-Tyr-Trp-Leu-Arg-Trp-Gly-].
XX
KW   neurokinin A antagonist; tachykinin; respiratory disease; asthma;
KW   analgesic; cyclic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "not an N-terminal amino acid, but condensed
FT                         with Gly(6) to form a cyclic peptide"
FT   Modified-site   6
FT                   /note= "not a C-terminal amino acid, but condensed
FT                         with Tyr(1) to form a cyclic peptide"
FT   Misc-difference 1,2,5
FT                   /note= "optionally Trp(2), or Tyr(1) and Trp(2), or
FT                         Trp(2) and Trp(5) are D-form residues"
XX
PN   WO9521187-A1.
XX
PD   10-AUG-1995.
XX
PF   10-JAN-1995;   95WO-US00296.
XX
PR   03-FEB-1994;   94US-0191571.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Buck SH,  Harbeson SL,  Kudlacz EM,  Owen TJ;
XX
DR   WPI; 1995-336695/43.
XX
PT   New cyclic peptide derivs. - are neurokinin A and tachykinin
PT   antagonists useful e.g. for treating asthma or as analgesics
XX
PS   Claims 5, 7; Pages 68, 69; 82pp; English.
XX
CC   The patent describes novel cyclic hexapeptide and octapeptide compounds
CC   which are antagonists of neurokinin A and which are useful medically as
CC   analgesics and for treating respiratory diseases such as asthma. The
CC   present sequence represents specifically preferred examples of the new
CC   peptides.
XX
SQ   Sequence   6 AA;

  Query Match             62.2%;  Score 28;  DB 16;  Length 6;
  Best Local Similarity   75.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              |:||
Db          2 WLRW 5


RESULT 35
AAR93707
ID   AAR93707 standard; peptide; 6 AA.
XX
AC   AAR93707;
XX
DT   10-MAY-1996  (first entry)
XX
DE   Cyclo[-Trp-trp-Leu-Arg-Trp-Gly-].
XX
KW   neurokinin A antagonist; tachykinin; respiratory disease; asthma;
KW   analgesic; cyclic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "not an N-terminal amino acid, but condensed
FT                         with Gly(6) to form a cyclic peptide"
FT   Modified-site   6
FT                   /note= "not a C-terminal amino acid, but condensed
FT                         with Trp(1) to form a cyclic peptide"
FT   Misc-difference 2
FT                   /note= "D-form residue"
XX
PN   WO9521187-A1.
XX
PD   10-AUG-1995.
XX
PF   10-JAN-1995;   95WO-US00296.
XX
PR   03-FEB-1994;   94US-0191571.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Buck SH,  Harbeson SL,  Kudlacz EM,  Owen TJ;
XX
DR   WPI; 1995-336695/43.
XX
PT   New cyclic peptide derivs. - are neurokinin A and tachykinin
PT   antagonists useful e.g. for treating asthma or as analgesics
XX
PS   Claim 5; Page 68; 82pp; English.
XX
CC   The patent describes novel cyclic hexapeptide and octapeptide compounds
CC   which are antagonists of neurokinin A and which are useful medically as
CC   analgesics and for treating respiratory diseases such as asthma. The
CC   present sequence represents a specifically preferred example of the new
CC   peptides.
XX
SQ   Sequence   6 AA;

  Query Match             62.2%;  Score 28;  DB 16;  Length 6;
  Best Local Similarity   75.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              |:||
Db          2 WLRW 5


RESULT 36
AAR93709
ID   AAR93709 standard; peptide; 6 AA.
XX
AC   AAR93709;
XX
DT   10-MAY-1996  (first entry)
XX
DE   Cyclo[-Tyr-trp-Leu-Arg-Trp-(D- or L-)Ala-].
XX
KW   neurokinin A antagonist; tachykinin; respiratory disease; asthma;
KW   analgesic; cyclic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "not an N-terminal amino acid, but condensed
```

```
FT                              with Ala(6) to form a cyclic peptide"
FT   Modified-site   6
FT                   /note= "not a C-terminal amino acid, but condensed
FT                              with Tyr(1) to form a cyclic peptide"
FT   Misc-difference 2
FT                   /note= "D-form residue"
FT   Misc-difference 6
FT                   /note= "L- or D-form residue"
XX
PN   WO9521187-A1.
XX
PD   10-AUG-1995.
XX
PF   10-JAN-1995;   95WO-US00296.
XX
PR   03-FEB-1994;   94US-0191571.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Buck SH,  Harbeson SL,  Kudlacz EM,  Owen TJ;
XX
DR   WPI; 1995-336695/43.
XX
PT   New cyclic peptide derivs. - are neurokinin A and tachykinin
PT   antagonists useful e.g. for treating asthma or as analgesics
XX
PS   Claim 6; Page 69; 82pp; English.
XX
CC   The patent describes novel cyclic hexapeptide and octapeptide compounds
CC   which are antagonists of neurokinin A and which are useful medically as
CC   analgesics and for treating respiratory diseases such as asthma. The
CC   present sequence represents a specifically preferred example of the new
CC   peptides.
XX
SQ   Sequence   6 AA;

  Query Match             62.2%;  Score 28;  DB 16;  Length 6;
  Best Local Similarity   75.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              |:||
Db          2 WLRW 5


RESULT 37
AAR74033
ID   AAR74033 standard; Peptide; 10 AA.
XX
AC   AAR74033;
XX
DT   19-DEC-1995  (first entry)
XX
DE   Bombesin-related peptide SAP bombesin-10.
XX
KW   Bombesin; frog; PCR; primer; amplification; probe; prohormone; human;
KW   veterinary medicine.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 10
FT                   /note= "amidated C-terminus"
XX
PN   US5410018-A.
XX
PD   25-APR-1995.
XX
PF   25-FEB-1994;   94US-0203196.
XX
PR   25-FEB-1994;   94US-0203196.
XX
PA   (OREG-) OREGON REGIONAL PRIMATE RES CENT.
XX
PI   Barry B,  Nagalla S,  Spindel ER;
XX
DR   WPI; 1995-169632/22.
XX
PT   Purified bombesin-related peptide(s) - prepared by recombinant DNA
PT   methods
XX
PS   Claim 2; Column 7-8; 10pp; English.
XX
CC   The peptides AAR74032-3 are derived from the bombesin-related prohormone
CC   AAR74034.  The peptides are generated by internal processing of the
CC   prohormone at the Ser-Leu and Lys-Lys sequences.  This peptide is
CC   designated SAP bombesin-10 ("BIM-26336") and corresponds to residues
CC   49-58 of the prohormone.  The SAP bombesin-10 is then modified from the
CC   prohormone-cleaved peptide by having an amidated methionyl residue.
CC   This peptide can be generated by an internal cleavage of the SAP
CC   bombesin-14 (AAR74032).  The amide gp. being donated from the Gly residue
CC   at position 59 of the prohormone.  The peptides have applications within
CC   human and veterinary medicine, especially to treat the diseases or
CC   disorders specified in US5217955, WO9402018 and WO9220363.
XX
SQ   Sequence   10 AA;

  Query Match             62.2%;  Score 28;  DB 16;  Length 10;
  Best Local Similarity   66.7%;  Pred. No. 1.7e+02;
  Matches    4;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              | | ||
Db          4 WARGHF 9


RESULT 38
AAR86144
ID   AAR86144 standard; peptide; 10 AA.
XX
AC   AAR86144;
XX
DT   26-JUN-1996  (first entry)
XX
DE   Anti-ELAM-1 binding peptide #121.
XX
KW   Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; selectin;
KW   receptor; leukocyte; vascular wall; endothelium; extravasation;
KW   inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell.
XX
OS   Synthetic.
XX
PN   WO9531210-A1.
XX
PD   23-NOV-1995.
XX
PF   11-MAY-1995;   95WO-US06315.
XX
PR   11-MAY-1994;   94US-0241054.
XX
PA   (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI   Barrett RW,  Cwirla SE,  Dower WJ,  Koller KJ,  Lee J;
PI   Martens CL,  Ruhland-fritsch B;
XX
DR   WPI; 1996-010687/01.
XX
PT   New peptide(s) that bind to endothelial leukocyte adhesion molecule
PT   1 - useful for treating inflammation and other E-selectin mediated
PT   diseases
XX
PS   Disclosure; Page 17; 85pp; English.
XX
CC   Peptides AAR86024-R86236 are examples of peptides and their mimetics
CC   that bind to endothelial leukocyte adhesion molecule (ELAM)-1.  This
CC   molecule is a member of the selectin family of receptors and is involved
```

CC in binding of leukocytes to the vascular endothelial wall prior to
CC extravasation of the leukocyte, e.g . to a site of inflammation.
CC The peptides bind pref. to E-selectin but may also bind L- or
CC P-selectin, and can be used to treat conditions mediated by E-selectin,
CC e.g. inflammatory conditions. The peptides have strong affinity for the
CC selectin receptors and inhibit the binding of the sialyl Lewis (SLe-x)
CC part of cell surface glycoproteins to E-selectin. The peptide are
CC small, generally less than 2 kD, have an IC50 of up to 100 micromole
CC against binding of HL60 cells to ELAM-1, have one or more peptide
CC linkages replaced by CH2OC(O)NR, phosphonate, CH2SO2NR, CH2NR, CON(R6),
CC or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alkyl.
CC The peptides may also have substituted N- and C-termini e.g.
CC succinimido, N-benzyloxycarbonyl or N-lower alkyl cpds.
XX
SQ Sequence 10 AA;

Query Match 62.2%; Score 28; DB 17; Length 10;
Best Local Similarity 75.0%; Pred. No. 1.7e+02;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
||:|
Db 6 WVKW 9

RESULT 39
AAW63962
ID AAW63962 standard; peptide; 10 AA.
XX
AC AAW63962;
XX
DT 25-MAR-2003 (updated)
DT 02-OCT-1998 (first entry)
XX
DE ELAM-1 peptide mimetic #117.
XX
KW Endothelial leukocyte adhesion molecule 1; ELAM-1; inflammation;
KW selectin; diagnosis; mimetic.
XX
OS Synthetic.
XX
PN US5728802-A.
XX
PD 17-MAR-1998.
XX
PF 12-MAY-1995; 95US-0439817.
XX
PR 12-MAY-1995; 95US-0439817.
PR 06-MAY-1992; 92US-0881395.
PR 05-MAY-1993; 93US-0057295.
PR 11-MAY-1994; 94US-0241054.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Barrett RW, Cwirla SE, Dower WJ, Koller KJ, Lee J;
PI Martens CL, Ruhland B;
XX
DR WPI; 1998-249882/22.
XX
PT Peptide(s) or their mimetic(s) that bind to E-selectin - useful for,
PT e.g. treating conditions mediated by E-selectin such as inflammatory
PT condition(s)
XX
PS Example 2; Column 91-92; 84pp; English.
XX
CC AAW63846-W64054 are peptides and peptide mimetics that bind selectins
CC including endothelial leukocyte adhesion molecule 1 (ELAM-1) and can be
CC used for blocking adhesion of leukocytes to the selectins. The peptides
CC have applications for the treatment of conditions mediated by
CC E-selectin, e.g. inflammatory conditions. They can also be used for
CC diagnostic purposes, e.g. for identifying the vascular site of E-selectin
CC in vivo or can be coupled to anti-inflammatory or other drugs.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 10 AA;

Query Match 62.2%; Score 28; DB 19; Length 10;
Best Local Similarity 75.0%; Pred. No. 1.7e+02;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 WVRW 4
||:|
Db 6 WVKW 9

RESULT 40
AAR36519
ID AAR36519 standard; peptide; 12 AA.
XX
AC AAR36519;
XX
DT 25-MAR-2003 (updated)
DT 11-AUG-1993 (first entry)
XX
DE D32.39 antibody isolated peptide.
XX
KW Generation; screening; selection; screening; peptide ligands;
KW receptor molecules; therapeutics; diagnostics.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Region 3..8
FT /note= "D32.39 epitope"
XX
PN WO9308278-A1.
XX
PD 29-APR-1993.
XX
PF 15-OCT-1992; 92WO-US08879.
XX
PR 16-OCT-1991; 91US-0778233.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Cull MG, Miller JF, Schatz PJ, Stemmer WPC;
XX
DR WPI; 1993-152471/18.
XX
PT Random peptide library and screening method - using vectors
PT encoding fusion proteins of DNA binding protein and peptide, used
PT in screening for ligands
XX
PS Disclosure; Fig 3; 153pp; English.
XX
CC The sequence is that of a peptide isolated by panning with the
CC D32.39 antibody, with an ELISA result of 0.1. This was done as
CC an example of a method of constructing a random peptide library
CC of at least 10(6) members. The method enables the generation,
CC screening and selection of peptide ligands and receptor molecules.
CC Peptides generated using the method can be used in therapeutics
CC and diagnostics, e.g. to inhibit receptor activity.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 12 AA;

Query Match 62.2%; Score 28; DB 14; Length 12;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 VRWH 5
||||
Db 2 VRWH 5

RESULT 41

AAR56756
ID AAR56756 standard; peptide; 12 AA.
XX
AC AAR56756;
XX
DT 25-MAR-2003 (updated)
DT 20-MAR-1995 (first entry)
XX
DE Random peptide #53 isolated by anti-dynorphin B Ab panning.
XX
KW Dynorphin B; epitope; antibody panning; random peptide library;
KW antibody D32.39; ligand screening.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Region 3..8
FT /label= D32.39_epitope
XX
PN US5338665-A.
XX
PD 16-AUG-1994.
XX
PF 15-OCT-1992; 92US-0963321.
XX
PR 16-OCT-1991; 91US-0778233.
PR 15-OCT-1992; 92US-0963321.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Schatz PJ, Stemmer WPC;
XX
DR WPI; 1994-263274/32.
XX
PT Construction of random peptide library - by creating vectors
PT contg. DNA encoding the random peptide(s) fused to DNA binding
PT proteins; used to screen for novel ligands
XX
PS Example 4; Fig 3B; 45pp; English.
XX
CC A random peptide library was constructed in E.coli hosts.
CC The library was lysed and panned using antibody D32.39 which
CC recognises the Dynorphin B epitope RQFKVV. Peptides isolated by
CC panning were sequenced and a consensus epitope was identified (see
CC features table). Arginine is invariant in the first position for all
CC the ELISA positive clones (AAR56701-R56758). No strong bias was
CC evident for the second position but in the third position, 5 amino
CC acids (Phe, His, Asp, Tyr, Trp) account for 98% of the residues. The
CC fourth position shows a strong bias for positively charged residues
CC (Lys and Arg) with almost exclusively hydrophobic residues at
CC position 5 (mostly Val). Val and Thr predominate at the sixth
CC position (76%) with Ser and Ile accounting for the remaining amino
CC acids.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 12 AA;

Query Match 62.2%; Score 28; DB 15; Length 12;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 VRWH 5
||||
Db 2 VRWH 5

RESULT 42
AAR91504
ID AAR91504 standard; Peptide; 12 AA.
XX
AC AAR91504;
XX
DT 25-MAR-2003 (updated)
DT 21-NOV-1996 (first entry)
XX
DE D32.39 monoclonal antibody peptide ligand 53.
XX
KW dynorphin B; random peptide library; construction; monoclonal antibody;
KW D32.39; epitope; screening.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Peptide 3..8
FT /note= "D32.39 epitope"
XX
PN US5498530-A.
XX
PD 12-MAR-1996.
XX
PF 15-AUG-1994; 94US-0290641.
XX
PR 15-OCT-1992; 92US-0963321.
PR 16-OCT-1991; 91US-0778233.
PR 15-AUG-1994; 94US-0290641.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Cull MG, Miller JF, Schatz PJ, Stemmer WPC;
XX
DR WPI; 1996-159686/16.
XX
PT Random peptide libraries comprising host cells expressing DNA
PT binding proteins fused with random peptide(s) - used to identify,
PT e.g. peptide ligands of receptors
XX
PS Example 4; Fig 3B; 46pp; English.
XX
CC A random peptide (RP) library can be constructed by transforming host
CC cells with a collection of recombinant vectors that encode a fusion
CC protein comprised of a DNA binding protein (BP) and a RP and also
CC contains a binding site for the DNA BP. The RP library can be used to
CC screen for novel ligands, the method resulting in the formation of a
CC complex comprising the fusion protein bound to a receptor through the RP
CC ligand and to the recombinant DNA vector through the DNA BP. An RP
CC library (AAR91450-506) was screened with D32.39 and a six amino acid
CC region of dynorphin B (RQFKVV), an opioid peptide, was found to be the
CC preferred recognition sequence for D32.39.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 12 AA;

Query Match 62.2%; Score 28; DB 17; Length 12;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 VRWH 5
||||
Db 2 VRWH 5

RESULT 43
AAW25286
ID AAW25286 standard; peptide; 12 AA.
XX
AC AAW25286;
XX
DT 14-OCT-1997 (first entry)
XX
DE Antibody D32.39 epitope #53.
XX
KW PCR; polymerase chain reaction; primer; amplify; lacI; headpiece domain;
KW random peptide library; DNA binding protein; receptor ligand; dimer;
KW fusion protein; epitope; antibody.
XX
OS Synthetic.

XX
FH Key Location/Qualifiers
FT Region 3..8
FT /note= "D32.39 recognition site"
XX
PN WO9640987-A1.
XX
PD 19-DEC-1996.
XX
PF 07-JUN-1996; 96WO-US09809.
XX
PR 26-OCT-1995; 95US-0548540.
PR 07-JUN-1995; 95US-0484090.
XX
PA (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PI Cull MG, Gates CM, Miller JF, Schatz PJ, Stemmer WPC;
XX
DR WPI; 1997-087065/08.
XX
PT Random peptide library and affinity enrichment methods for screening
PT it - useful to identify peptide(s) that bind receptor mols. of
PT interest, useful for therapeutic, diagnostic and related purposes
XX
PS Example 4; Fig 3b; 149pp; English.
XX
CC AAW25231-W25288 represent epitopes for the antibody D32.39. These
CC sequences were isolated by a method of the invention to isolate a DNA
CC binding protein, or a peptide with specific affinity for a receptor. The
CC method comprises providing a recombinant DNA vector encoding a peptide
CC having specific affinity for a receptor. A library of oligonucleotides
CC encoding different potential DNA binding proteins is inserted in-frame
CC into the vector to create a fusion protein library. Host cells are
CC transformed, and cultured to express the fusion protein. If a fusion
CC protein comprises a potential DNA binding protein with affinity for the
CC vector, the fusion protein binds to the vector to form a complex. The
CC host cells are lysed to isolate the complexes which are contacted with a
CC receptor to induce peptide binding to the receptor. The random peptide
CC library and the methods for screening it can be used to identify peptides
CC that bind receptor molecules of interest. The peptides can be used for
CC therapeutic, diagnostic and related purposes, e.g. to bind the receptor,
CC or an analogue, and so inhibit or promote the activity of the receptor.
CC The method of affinity enrichment allows a very large library of peptides
CC to be screened, and by identifying the peptide de novo, the sequence or
CC structure of the receptor molecule or the natural binding partner of the
CC receptor need not be known.
XX
SQ Sequence 12 AA;

Query Match 62.2%; Score 28; DB 18; Length 12;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 VRWH 5
||||
Db 2 VRWH 5

RESULT 44
AAB60032
ID AAB60032 standard; Peptide; 12 AA.
XX
AC AAB60032;
XX
DT 05-NOV-2001 (first entry)
XX
DE Internalising peptide SEQ ID NO: 47.
XX
KW Internalising peptide; transport; apoptosis; arthritis; cancer;
KW stem cell; cell differentiation; immune response stimulation;
KW HIV vaccine.
XX
OS Synthetic.
XX
PN WO200115511-A2.
XX
PD 08-MAR-2001.
XX
PF 31-AUG-2000; 2000WO-US24034.
XX
PR 01-SEP-1999; 99US-0151980.
PR 13-MAR-2000; 2000US-0188944.
XX
PA (UYPI-) UNIV PITTSBURGH.
XX
PI Robbins PD, Mi Z, Frizzell R, Glorioso JC, Gambotto A;
XX
DR WPI; 2001-273309/28.
XX
PT Peptides that facilitate uptake and cytoplasmic and/or nuclear
PT transport of proteins, DNA and viruses, useful, e.g. for facilitating
PT uptake of antigens in immunogenic compositions -
XX
PS Claim 1; Page 123; 129pp; English.
XX
CC The present invention provides the sequences of 75 peptides which
CC facilitate the uptake and transport of viruses, proteins and nucleic
CC acids. These internalising peptides can be used for transport into the
CC cytoplasm or the nucleus. They are useful for facilitating uptake into
CC the cell, inducing apoptosis, for example in the treatment of arthritis
CC and cancer, to expand a population of stem cells or differentiated cells,
CC to stimulate cell differentiation, facilitate the integration of AAV into
CC the genome of a cell, and to stimulate an immune response, for example in
CC the case of a HIV vaccine. The present sequence is one of the peptides of
CC the invention.
XX
SQ Sequence 12 AA;

Query Match 62.2%; Score 28; DB 22; Length 12;
Best Local Similarity 60.0%; Pred. No. 2e+02;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WVRWH 5
| ||
Db 3 WTPWH 7

RESULT 45
ABP46201
ID ABP46201 standard; peptide; 13 AA.
XX
AC ABP46201;
XX
DT 19-AUG-2002 (first entry)
XX
DE Human BLyS binding scFv VH CDR3 SEQ ID 2212.
XX
KW BLys; B lymphocyte stimulator; TNF superfamily; human; cytostatic;
KW tumour necrosis factor; B cell proliferation; B cell differentiation;
KW immunosuppressive; immunostimulant; immunomodulatory; antirheumatic;
KW antiAIDS; vaccine; cancer; immune; autoimmune disorder; immunodeficiency;
KW systemic lupus erythematosus; rheumatoid arthritis; CVID; AIDS;
KW common variable immunodeficiency; acquired immunodeficiency syndrome.
XX
OS Homo sapiens.
XX
PN WO200202641-A1.
XX
PD 10-JAN-2002.
XX
PF 15-JUN-2001; 2001WO-US19110.
XX
PR 16-JUN-2000; 2000US-212210P.
PR 17-OCT-2000; 2000US-240816P.
PR 16-MAR-2001; 2001US-276248P.
PR 21-MAR-2001; 2001US-277379P.

PR 25-MAY-2001; 2001US-293499P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
PA (CAMB-) CAMBRIDGE ANTIBODY TECHNOLOGY.
XX
PI Ruben SM, Barash SC, Choi GH, Vaughan T, Hilbert D;
XX
DR WPI; 2002-114799/15.
XX
PT Antibodies against B Lymphocyte Stimulating polypeptides, useful for
PT the diagnosis and treatment of cancers and immune disorders -
XX
PS Claim 2; Page 2952; 3148pp; English.
XX
CC This invention describes novel antibodies that immunospecifically bind to
CC B Lymphocyte Stimulator (BLyS) polypeptides. BLyS is a member of the
CC tumour necrosis factor (TNF) super family and induces B cell
CC proliferation and differentiation. The antibodies of the invention have
CC cytostatic, immunosuppressive, immunostimulant, immunomodulatory,
CC antirheumatic and antiAIDS activity and can be used in vaccines to
CC inhibit the expression and activity of BLyS. The antibodies bind to BLyS
CC and so may be used to detect and quantitate the presence of BLyS in
CC biological samples and may be used in this way to diagnose disease
CC associated with aberrant expression of BLyS. They may also be
CC administered to treat diseases associated with aberrant BLyS expression
CC and activity such as cancer, immune, and autoimmune disorders and
CC diseases, e.g. systemic lupus erythematosus, rheumatoid arthritis,
CC immunodeficiency (e.g. common variable immunodeficiency (CVID) and
CC acquired immunodeficiency syndrome (AIDS)). ABP43990-ABP47228 represent
CC the antibodies and fragments of the antibodies described in the method
CC of the invention.
XX
SQ Sequence 13 AA;

Query Match 62.2%; Score 28; DB 23; Length 13;
Best Local Similarity 50.0%; Pred. No. 2.2e+02;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WVRWHF 6
              |  |:|
Db          6 WPNWYF 11
```

Search completed: December 12, 2003, 10:29:02
Job time : 31.3 secs

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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:44:55 ; Search time 7.33333 Seconds
(without alignments)
38.476 Million cell updates/sec

Title: US-09-912-414-2
Perfect score: 45
Sequence: 1 WVRWHF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 795

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_41:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID		Description
1	22	48.9	9	1	LITR_PHYRO	P08946	phyllomedus
2	22	48.9	11	1	RANC_RANPI	P08951	rana pipien
3	20	44.4	9	1	LITO_LITAU	P08945	litoria aur
4	20	44.4	13	1	BOML_PSEGU	P42991	pseudophryn
5	19.5	43.3	5	1	UF01_MOUSE	P38639	mus musculu
6	19	42.2	10	1	LABA_JATMU	P13270	jatropha mu
7	18	40.0	9	1	COW_CONVE	P83047	conus ventr
8	18	40.0	13	1	YPNP_PHOLU	P41122	photorhabdu
9	17	37.8	11	1	MLG_THETS	P41989	theromyzon
10	17	37.8	13	1	EI21_LITRU	P82097	litoria rub
11	17	37.8	13	1	EI22_LITRU	P82098	litoria rub
12	17	37.8	13	1	TEML_RANTE	P57104	rana tempor
13	16	35.6	8	1	ACI_THUAL	P18691	thunnus alb
14	16	35.6	13	1	MLA_ANOCA	P41589	anolis caro
15	16	35.6	13	1	MLA_CAMDR	P01198	camelus dro
16	16	35.6	14	1	LPW_RHIME	P18854	rhizobium m
17	15	33.3	7	1	TPFY_PACDA	P83455	pachymedusa
18	15	33.3	10	1	AEGL_AGRAE	P83465	agrocybe ae
19	15	33.3	12	1	RF1_CONSP	P58805	conus spuri
20	15	33.3	15	1	CX3B_CONQU	P58842	conus querc
21	15	33.3	15	1	GLN2_PINPS	P81107	pinus pinas
22	14	31.1	10	1	BPP2_BOTJA	P01022	bothrops ja
23	14	31.1	10	1	FARP_MYTED	P42560	mytilus edu
24	14	31.1	10	1	GRP_RANRI	P23260	rana ridibu
25	14	31.1	11	1	CA22_LITCI	P82088	litoria cit
26	14	31.1	11	1	CA42_LITCI	P82092	litoria cit
27	14	31.1	13	1	BPP1_BOTJA	P01020	bothrops ja
28	14	31.1	13	1	CXA2_CONGE	P01520	conus geogr
29	14	31.1	14	1	ALYT_ALYOB	P08944	alytes obst
30	14	31.1	14	1	MAST_PARID	P42716	parapolybia
31	14	31.1	14	1	MAST_VESBA	P21654	vespa basal
32	14	31.1	14	1	MAST_VESXA	P01515	vespa xanth
33	14	31.1	15	1	AH2_PRUSE	P29260	prunus sero
34	14	31.1	15	1	DCMM_PSECH	P19917	pseudomonas
35	14	31.1	15	1	MK2A_PALPR	P80409	palomena pr
36	14	31.1	15	1	RM12_YEAST	P36522	saccharomyc
37	13	28.9	5	1	BPP7_BOTIN	P30425	bothrops in
38	13	28.9	9	1	NEF_HV1Z8	P12481	human immun
39	13	28.9	10	1	APE_CAPGI	P80474	capnocytoph
40	13	28.9	10	1	GON1_ALLMI	P37041	alligator m
41	13	28.9	10	1	GON2_CHEPR	P80678	chelyosoma
42	13	28.9	10	1	GON2_CHICK	P37043	gallus gall
43	13	28.9	10	1	GON3_ONCKE	P20367	oncorhynchu
44	13	28.9	10	1	NO40_TOBAC	P55962	nicotiana t
45	13	28.9	12	1	UP01_CAEEL	P55954	caenorhabdi

ALIGNMENTS

RESULT 1
LITR_PHYRO
ID LITR_PHYRO STANDARD; PRT; 9 AA.
AC P08946;
DT 01-NOV-1988 (Rel. 09, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Rhodei-litorin.
OS Phyllomedusa rohdei (Rohde's leaf frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC Phyllomedusinae; Phyllomedusa.
OX NCBI_TaxID=8394;
RN [1]
RP SEQUENCE.
RC TISSUE=Skin secretion;
RX MEDLINE=85127560; PubMed=3838283;
RA Barra D., Erspamer G.F., Simmaco M., Bossa F., Melchiorri P.,
RA Erspamer V.;
RT "Rohdei-litorin: a new peptide from the skin of Phyllomedusa rohdei.";
RL FEBS Lett. 182:53-56(1985).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Skin.
CC -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC FAMILY.
DR PIR; S07241; S07241.
DR InterPro; IPR000874; Bombesin.
DR Pfam; PF02044; Bombesin; 1.
DR PROSITE; PS00257; BOMBESIN; 1.
KW Amphibian defense peptide; Bombesin family; Amidation;
KW Pyrrolidone carboxylic acid.
FT MOD_RES 1 1 PYRROLIDONE CARBOXYLIC ACID.
FT MOD_RES 9 9 AMIDATION.
SQ SEQUENCE 9 AA; 1090 MW; 4ECCC1E861ADC377 CRC64;

Query Match 48.9%; Score 22; DB 1; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy          1 WVRWHF 6
              |  ||
Db          3 WATGHF 8
```

RESULT 2
RANC_RANPI
ID RANC_RANPI STANDARD; PRT; 11 AA.
AC P08951;
DT 01-NOV-1988 (Rel. 09, Created)
DT 01-NOV-1988 (Rel. 09, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Ranatensin-C.
OS Rana pipiens (Northern leopard frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX NCBI_TaxID=8404;

```
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=84131098; PubMed=6141890;
RA   Nakajima T.;
RL   Unpublished results, cited by:
RL   Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
RL   Comp. Biochem. Physiol. 77C:99-108(1984).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation.
FT   MOD_RES      11     11       AMIDATION.
SQ   SEQUENCE   11 AA;  1304 MW;  D6C9885A61ADC366 CRC64;

  Query Match             48.9%;  Score 22;  DB 1;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 2e+02;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              |   ||
Db          5 WATGHF 10


RESULT 3
LITO_LITAU
ID   LITO_LITAU     STANDARD;      PRT;     9 AA.
AC   P08945;
DT   01-NOV-1988 (Rel. 09, Created)
DT   01-FEB-1994 (Rel. 28, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Litorin.
OS   Litoria aurea (Green and golden bell frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Pelodryadinae; Litoria.
OX   NCBI_TaxID=8371;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=75187011; PubMed=1140241;
RA   Anastasi A., Erspamer V., Endean R.;
RT   "Aminoacid composition and sequence of litorin, a bombesin-like
RT   nonapeptide from the skin of the Australian leptodactylid frog
RT   Litoria aurea.";
RL   Experientia 31:510-511(1975).
RN   [2]
RP   SEQUENCE (METHYLATED VARIANT).
RC   TISSUE=Skin secretion;
RX   MEDLINE=78003546; PubMed=908397;
RA   Anastasi A., Montecucchi P.C., Angelucci F., Erspamer V., Endean R.;
RT   "Glu(OMe)3-litorin, the second bombesin-like peptide occurring in
RT   methanol extracts of the skin of the Australian frog Litoria aurea.";
RL   Experientia 33:1289-1289(1977).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   PIR; S07204; S07204.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation; Methylation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES      1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES      2      2       METHYLATION (PARTIAL).
FT   MOD_RES      9      9       AMIDATION.
SQ   SEQUENCE   9 AA;  1103 MW;  D7CCC1E862CDC366 CRC64;

  Query Match             44.4%;  Score 20;  DB 1;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              |   ||
Db          3 WAVGHF 8


RESULT 4
BOML_PSEGU
ID   BOML_PSEGU     STANDARD;      PRT;     13 AA.
AC   P42991;
DT   01-NOV-1995 (Rel. 32, Created)
DT   01-NOV-1995 (Rel. 32, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Bombesin-like peptide L (PG-L).
OS   Pseudophryne guentheri (Guenther's toadlet).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
OC   Myobatrachinae; Pseudophryne.
OX   NCBI_TaxID=30349;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=90287814; PubMed=2356157;
RA   Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA   Roberts J.D., Melchiorri P., Erspamer V.;
RT   "Six novel tachykinin- and bombesin-related peptides from the skin of
RT   the Australian frog Pseudophryne guntheri.";
RL   Peptides 11:299-304(1990).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   PIR; A60409; A60409.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES      1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES     13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1372 MW;  D6DE0D24BD98C366 CRC64;

  Query Match             44.4%;  Score 20;  DB 1;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 4.9e+02;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              |   ||
Db          7 WAVGHF 12


RESULT 5
UF01_MOUSE
ID   UF01_MOUSE     STANDARD;      PRT;     5 AA.
AC   P38639;
DT   01-OCT-1994 (Rel. 30, Created)
DT   01-OCT-1994 (Rel. 30, Last sequence update)
DT   01-FEB-1995 (Rel. 31, Last annotation update)
DE   Unknown protein from 2D-page of fibroblasts (P19) (Fragment).
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Fibroblast;
RX   MEDLINE=95009907; PubMed=7523108;
RA   Merrick B.A., Patterson R.M., Wichter L.L., He C., Selkirk J.K.;
RT   "Separation and sequencing of familiar and novel murine proteins
RT   using preparative two-dimensional gel electrophoresis.";
```

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RL   Electrophoresis 15:735-745(1994).
CC   -!- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED PI OF THIS UNKNOWN
CC       PROTEIN IS: 6.6, ITS MW IS: 19 kDa.
FT   NON_TER       5       5
SQ   SEQUENCE   5 AA;  717 MW;  7364087043100000 CRC64;

  Query Match             43.3%;  Score 19.5;  DB 1;  Length 5;
  Best Local Similarity   60.0%;  Pred. No. 1.3e+05;
  Matches    3;  Conservative    1;  Mismatches    0;  Indels    1;  Gaps    1;

Qy          1 WV-RW 4
              |: ||
Db          1 WIGRW 5


RESULT 6
LABA_JATMU
ID   LABA_JATMU     STANDARD;      PRT;     10 AA.
AC   P13270;
DT   01-JAN-1990 (Rel. 13, Created)
DT   01-JAN-1990 (Rel. 13, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Labaditin.
OS   Jatropha multifida (Physic nut).
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
OC   eurosids I; Malpighiales; Euphorbiaceae; Jatropha.
OX   NCBI_TaxID=3996;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Latex;
RA   Kosasi S., van der Sluis W.G., Boelens R., T'Hart L.A., Labadie R.P.;
RT   "Labaditin, a novel cyclic decapeptide from the latex of Jatropha
RT   multifida L. (Euphorbiaceae). Isolation and sequence determination
RT   by means of two-dimensional NMR.";
RL   FEBS Lett. 256:91-96(1989).
CC   -!- FUNCTION: LABADITIN IS AN ACTIVE PEPTIDE WHICH INHIBITS THE
CC       CLASSICAL PATHWAY OF COMPLEMENT ACTIVATION IN VITRO. ACTIVITY
CC       SEEMS TO BE BASED ON AN INTERACTION WITH C1.
CC   -!- PTM: This is a cyclic peptide.
CC   -!- DISEASE: LATEX OF THIS PLANT IS USED IN FOLKLORIC MEDICINE FOR
CC       TREATMENT OF INFECTED WOUNDS, SKINS INFECTIONS AND SCABIES.
SQ   SEQUENCE   10 AA;  1089 MW;  D98AAD6362D1B362 CRC64;

  Query Match             42.2%;  Score 19;  DB 1;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 5.6e+02;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              |  |
Db          4 WTVW 7


RESULT 7
COW_CONVE
ID   COW_CONVE      STANDARD;      PRT;     9 AA.
AC   P83047;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Contryphan-Vn.
OS   Conus ventricosus (Mediterranean cone).
OC   Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC   Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC   Neogastropoda; Conoidea; Conidae; Conus.
OX   NCBI_TaxID=117992;
RN   [1]
RP   SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY.
RC   TISSUE=Venom;
RX   MEDLINE=21547785; PubMed=11688995;
RA   Massilia G.R., Schinina M.E., Ascenzi P., Polticelli F.;
RT   "Contryphan-Vn: a novel peptide from the venom of the Mediterranean
RT   snail Conus ventricosus.";
RL   Biochem. Biophys. Res. Commun. 288:908-913(2001).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC   -!- MASS SPECTROMETRY: MW=1088.6; METHOD=MALDI.
CC   -!- SIMILARITY: BELONGS TO THE CONTRYPHAN FAMILY.
KW   Toxin; Amidation; D-amino acid.
FT   DISULFID      3       9
FT   MOD_RES       5       5       D-TRYPTOPHAN.
FT   MOD_RES       9       9       AMIDATION.
SQ   SEQUENCE   9 AA;  1091 MW;  8D38676323676EBA CRC64;

  Query Match             40.0%;  Score 18;  DB 1;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              |  |
Db          5 WKPW 8


RESULT 8
YPNP_PHOLU
ID   YPNP_PHOLU     STANDARD;      PRT;     13 AA.
AC   P41122;
DT   01-FEB-1995 (Rel. 31, Created)
DT   01-FEB-1995 (Rel. 31, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Hypothetical protein in pnp 3'region (ORF3) (Fragment).
OS   Photorhabdus luminescens (Xenorhabdus luminescens).
OC   Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC   Enterobacteriaceae; Photorhabdus.
OX   NCBI_TaxID=29488;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=K122;
RX   MEDLINE=94266731; PubMed=8206856;
RA   Clarke D.J., Dowds B.C.A.;
RT   "The gene coding for polynucleotide phosphorylase in Photorhabdus sp.
RT   strain K122 is induced at low temperatures.";
RL   J. Bacteriol. 176:3775-3784(1994).
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; X76069; CAA53672.1; -.
KW   Hypothetical protein.
FT   NON_TER       13      13
SQ   SEQUENCE   13 AA;  1634 MW;  64774A4F6267A364 CRC64;

  Query Match             40.0%;  Score 18;  DB 1;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 1.1e+03;
  Matches    2;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              ::||
Db          4 FLRW 7


RESULT 9
MLG_THETS
ID   MLG_THETS      STANDARD;      PRT;     11 AA.
AC   P41989;
DT   01-NOV-1995 (Rel. 32, Created)
DT   01-NOV-1995 (Rel. 32, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Melanotropin gamma (Gamma-melanocyte stimulating hormone) (Gamma-MSH).
OS   Theromyzon tessulatum (Leech).
OC   Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
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OC   Rhynchobdellida; Glossiphoniidae; Theromyzon.
OX   NCBI_TaxID=13286;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Brain;
RX   MEDLINE=94298944; PubMed=8026574;
RA   Salzet M., Wattez C., Bulet P., Malecha J.;
RT   "Isolation and structural characterization of a novel peptide related
RT   to gamma-melanocyte stimulating hormone from the brain of the leech
RT   Theromyzon tessulatum.";
RL   FEBS Lett. 348:102-106(1994).
CC   -!- SIMILARITY: BELONGS TO THE POMC FAMILY.
DR   PIR; S45698; S45698.
KW   Hormone; Amidation.
FT   MOD_RES      11     11       AMIDATION.
SQ   SEQUENCE   11 AA;  1486 MW;  2DB8FACE6409C1E8 CRC64;

  Query Match             37.8%;  Score 17;  DB 1;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.3e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WVRWHF 6
              :|  ||
Db          1 YVMGHF 6


RESULT 10
EI21_LITRU
ID   EI21_LITRU     STANDARD;      PRT;    13 AA.
AC   P82097;
DT   28-FEB-2003 (Rel. 41, Created)
DT   28-FEB-2003 (Rel. 41, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Electrin 2.1.
OS   Litoria rubella (Desert tree frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Pelodryadinae; Litoria.
OX   NCBI_TaxID=104895;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RA   Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
RT   "Peptides from the skin glands of the Australian buzzing tree frog
RT   Litori electrica. Comparison with the skin peptides from Litoria
RT   rubella.";
RL   Aust. J. Chem. 52:639-645(1999).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
KW   Amphibian defense peptide; Amidation.
FT   MOD_RES      13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1599 MW;  C1808EF326F57322 CRC64;

  Query Match             37.8%;  Score 17;  DB 1;  Length 13;
  Best Local Similarity   66.7%;  Pred. No. 1.5e+03;
  Matches    2;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          2 VRW 4
              |:|
Db          6 VKW 8


RESULT 11
EI22_LITRU
ID   EI22_LITRU     STANDARD;      PRT;    13 AA.
AC   P82098;
DT   28-FEB-2003 (Rel. 41, Created)
DT   28-FEB-2003 (Rel. 41, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Electrin 2.2.
OS   Litoria rubella (Desert tree frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Pelodryadinae; Litoria.
OX   NCBI_TaxID=104895;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RA   Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
RT   "Peptides from the skin glands of the Australian buzzing tree frog
RT   Litori electrica. Comparison with the skin peptides from Litoria
RT   rubella.";
RL   Aust. J. Chem. 52:639-645(1999).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
KW   Amphibian defense peptide; Amidation.
FT   MOD_RES      13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1598 MW;  C1808EF33B357322 CRC64;

  Query Match             37.8%;  Score 17;  DB 1;  Length 13;
  Best Local Similarity   66.7%;  Pred. No. 1.5e+03;
  Matches    2;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          2 VRW 4
              |:|
Db          6 VKW 8


RESULT 12
TEML_RANTE
ID   TEML_RANTE     STANDARD;      PRT;    13 AA.
AC   P57104;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Temporin L.
OS   Rana temporaria (European common frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=8407;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=97175050; PubMed=9022710;
RA   Simmaco M., Mignogna G., Canofeni S., Miele R., Mangoni M.L.,
RA   Barra D.;
RT   "Temporins, antimicrobial peptides from the European red frog Rana
RT   temporaria.";
RL   Eur. J. Biochem. 242:788-792(1996).
CC   -!- FUNCTION: HAS ANTIBACTERIAL ACTIVITY AGAINST GRAM-NEGATIVE AND
CC       GRAM-POSITIVE BACTERIA.
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: Belongs to the brevinin family.
KW   Amphibian defense peptide; Antibiotic; Amidation.
FT   MOD_RES      13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1641 MW;  9EBDCB1FAFF7C325 CRC64;

  Query Match             37.8%;  Score 17;  DB 1;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    2;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 WVRW 4
              :|:|
Db          1 FVQW 4


RESULT 13
ACI_THUAL
ID   ACI_THUAL      STANDARD;      PRT;     8 AA.
AC   P18691;
DT   01-NOV-1990 (Rel. 16, Created)
DT   01-NOV-1990 (Rel. 16, Last sequence update)
DT   01-NOV-1990 (Rel. 16, Last annotation update)
DE   Angiotensin-converting enzyme inhibitor.
OS   Thunnus albacares (Yellowfin tuna) (Neothunnus macropterus).
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OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombroidei;
OC   Scombridae; Thunnus.
OX   NCBI_TaxID=8236;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Muscle;
RX   MEDLINE=88326322; PubMed=3415688;
RA   Kohama Y., Matsumoto S., Oka H., Teramoto T., Okabe M., Mimura T.;
RT   "Isolation of angiotensin-converting enzyme inhibitor from tuna
RT   muscle.";
RL   Biochem. Biophys. Res. Commun. 155:332-337(1988).
DR   PIR; A31570; A31570.
SQ   SEQUENCE   8 AA;  953 MW;  6AA863733051F1B7 CRC64;

  Query Match             35.6%;  Score 16;  DB 1;  Length 8;
  Best Local Similarity   33.3%;  Pred. No. 1.3e+05;
  Matches    1;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          2 VRW 4
              ::|
Db          4 IKW 6


RESULT 14
MLA_ANOCA
ID   MLA_ANOCA      STANDARD;      PRT;    13 AA.
AC   P41589;
DT   01-NOV-1995 (Rel. 32, Created)
DT   01-NOV-1995 (Rel. 32, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Melanotropin alpha (Alpha-MSH).
OS   Anolis carolinensis (Green anole) (American chameleon).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Iguania; Iguanidae; Polychrotinae; Anolis.
OX   NCBI_TaxID=28377;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Pituitary;
RX   MEDLINE=92270473; PubMed=1667689;
RA   Dores R.M., Lancha A., Rand-Weaver M., Jankelow L., Adamczyk D.L.;
RT   "Detection of a novel sequence change in the major form of alpha-MSH
RT   isolated from the intermediate pituitary of the reptile, Anolis
RT   carolinensis.";
RL   Peptides 12:1261-1266(1991).
CC   -!- SIMILARITY: BELONGS TO THE POMC FAMILY.
DR   InterPro; IPR001941; Mcortin_ACTH.
DR   Pfam; PF00976; ACTH_domain; 1.
KW   Hormone; Amidation.
FT   MOD_RES      13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1608 MW;  FF990A7358BB09C1 CRC64;

  Query Match             35.6%;  Score 16;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.3e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          3 RW 4
              ||
Db          8 RW 9


RESULT 15
MLA_CAMDR
ID   MLA_CAMDR      STANDARD;      PRT;    13 AA.
AC   P01198;
DT   21-JUL-1986 (Rel. 01, Created)
DT   21-JUL-1986 (Rel. 01, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Melanotropin alpha (Alpha-MSH).
OS   Camelus dromedarius (Dromedary) (Arabian camel), and
OS   Equus caballus (Horse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.
OX   NCBI_TaxID=9838, 9796;
RN   [1]
RP   SEQUENCE.
RC   SPECIES=C.dromedarius;
RX   MEDLINE=75146434; PubMed=1125179;
RA   Li C.H., Danho W.O., Chung D., Rao A.J.;
RT   "Isolation, characterization, and amino acid sequence of
RT   melanotropins from camel pituitary glands.";
RL   Biochemistry 14:947-952(1975).
RN   [2]
RP   SEQUENCE.
RC   SPECIES=Horse; TISSUE=Pituitary;
RA   Dixon J.S., Li C.H.;
RT   "The isolation and structure of alpha-melanocyte-stimulating hormone
RT   from horse pituitaries.";
RL   J. Am. Chem. Soc. 82:4568-4572(1960).
CC   -!- SIMILARITY: BELONGS TO THE POMC FAMILY.
DR   PIR; A01464; MTCMAD.
DR   PIR; A91785; MTHOAD.
DR   InterPro; IPR001941; Mcortin_ACTH.
DR   Pfam; PF00976; ACTH_domain; 1.
KW   Hormone; Acetylation; Amidation.
FT   MOD_RES       1      1       ACETYLATION (IN ABOUT 50% OF CAMEL
FT                                MOLECULES).
FT   MOD_RES      13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1624 MW;  FF991CA958BB09C1 CRC64;

  Query Match             35.6%;  Score 16;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.3e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          3 RW 4
              ||
Db          8 RW 9


Search completed: December  3, 2003, 11:51:51
Job time : 9.33333 secs
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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:48:05 ; Search time 26.3333 Seconds
(without alignments)
58.797 Million cell updates/sec

Title: US-09-912-414-9
Perfect score: 31
Sequence: 1 WXXWXF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 3526

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_23:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*
16: sp_bacteriap:*
17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	21	67.7	9	2	Q9R5M1	Q9r5m1 staphylococ
2	21	67.7	9	9	Q38366	bacteriopha
3	20	64.5	9	8	Q8SHF0	Q8shf0 chamaeleo n
4	20	64.5	12	7	O77919	O77919 pseudotroph
5	20	64.5	13	4	Q16406	Q16406 homo sapien
6	20	64.5	15	2	Q53580	Q53580 rhodobacter
7	17	54.8	8	8	Q94VC1	Q94vc1 varanus rud
8	17	54.8	11	8	Q94V77	Q94v77 heloderma s
9	17	54.8	13	4	Q9UDC6	Q9udc6 homo sapien
10	17	54.8	14	10	Q9SAP8	Q9sap8 pisum sativ
11	16	51.6	8	8	Q94VF6	Q94vf6 varanus job
12	16	51.6	8	8	Q8WGD7	Q8wgd7 lomis hirta
13	16	51.6	8	8	Q94V88	Q94v88 varanus tri
14	16	51.6	8	8	Q9TD02	Q9td02 terranatos
15	16	51.6	8	8	Q9T4Y2	Q9t4y2 asterina pe
16	16	51.6	8	8	Q94VJ4	Q94vj4 varanus ben
17	16	51.6	8	8	Q94V91	Q94v91 varanus tim
18	16	51.6	8	8	Q94VE4	Q94ve4 varanus mel
19	16	51.6	8	8	Q94VF9	Q94vf9 varanus ind
20	16	51.6	9	8	Q9T688	Q9t688 gecko gecko
21	16	51.6	9	8	Q94VH4	Q94vh4 varanus gla
22	16	51.6	9	8	Q94VD8	Q94vd8 varanus nil
23	16	51.6	9	8	Q94VI8	Q94vi8 varanus ere
24	16	51.6	9	8	Q94VJ1	Q94vj1 varanus dor
25	16	51.6	9	8	Q8WGE6	Q8wge6 procambarus
26	16	51.6	9	8	Q94VE1	Q94ve1 varanus mer
27	16	51.6	10	2	Q93T35	Q93t35 acinetobact
28	16	51.6	10	8	Q9T8P3	Q9t8p3 liolaemus a
29	16	51.6	10	8	Q9B4W1	Q9b4w1 triturus vu
30	16	51.6	10	8	Q9T8K7	Q9t8k7 liolaemus m
31	16	51.6	10	8	Q9T8N1	Q9t8n1 liolaemus p
32	16	51.6	10	8	O79903	O79903 oplurus cuv
33	16	51.6	10	8	Q8WDH0	Q8wdh0 anolis limi
34	16	51.6	10	8	Q8W969	Q8w969 anolis orto
35	16	51.6	10	8	Q8WDH8	Q8wdh8 anolis mest
36	16	51.6	10	8	O79924	O79924 elgaria pan
37	16	51.6	10	8	Q9T8T6	Q9t8t6 liolaemus m
38	16	51.6	10	8	Q9T8L3	Q9t8l3 liolaemus l
39	16	51.6	10	8	P92616	P92616 aspidosceli
40	16	51.6	10	8	Q9T8G8	Q9t8g8 liolaemus c
41	16	51.6	10	8	Q9B4X0	Q9b4x0 notophthalm
42	16	51.6	10	8	Q8SHI3	Q8shi3 chamaeleo c
43	16	51.6	10	8	Q958K9	Q958k9 rana boylii
44	16	51.6	10	8	Q9TFU9	Q9tfu9 teratoscinc
45	16	51.6	10	8	Q9T8X7	Q9t8x7 phymaturus

ALIGNMENTS

RESULT 1
Q9R5M1
ID Q9R5M1 PRELIMINARY; PRT; 9 AA.
AC Q9R5M1;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE 66 kDa cell surface adhesin for heparan sulfate (Fragment).
OS Staphylococcus aureus.
OC Bacteria; Firmicutes; Bacillales; Staphylococcus.
OX NCBI_TaxID=1280;
RN [1]
RP SEQUENCE.
RX MEDLINE=92176005; PubMed=1541563;
RA Liang O.D., Ascencio F., Fransson L.A., Wadstrom T.;
RT "Binding of heparan sulfate to Staphylococcus aureus.";
RL Infect. Immun. 60:899-906(1992).
FT NON_TER 1 1
FT NON_TER 9 9
SQ SEQUENCE 9 AA; 990 MW; 2289DDD7337861B3 CRC64;

Query Match 67.7%; Score 21; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 8.3e+05;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXW 4
| |
Db 2 WTGW 5

RESULT 2
Q38366
ID Q38366 PRELIMINARY; PRT; 9 AA.
AC Q38366;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE E gene product (Fragment).
OS Bacteriophage phi-X174.

```
OC   Viruses; ssDNA viruses; Microviridae; Microvirus.
OX   NCBI_TaxID=10847;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=88118956; PubMed=2963134;
RA   Buckley K.J., Hayashi M.;
RT   "Role of premature translational termination in the regulation of
RT   expression of the phiX174 lysis gene.";
RL   J. Mol. Biol. 198:599-607(1987).
DR   EMBL; X07809; CAA30668.1; -.
FT   NON_TER       9      9
SQ   SEQUENCE   9 AA;  1207 MW;  C093B37731B36412 CRC64;

  Query Match             67.7%;  Score 21;  DB 9;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          4 WTLW 7


RESULT 3
Q8SHF0
ID   Q8SHF0      PRELIMINARY;      PRT;     9 AA.
AC   Q8SHF0;
DT   01-JUN-2002 (TrEMBLrel. 21, Created)
DT   01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT   01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Chamaeleo namaquensis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Iguania; Acrodonta; Chamaeleonidae; Chamaeleo.
OX   NCBI_TaxID=179917;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Townsend T.M., Larson A.L.;
RT   "Molecular Phylogenetics and Mitochondrial Genomic Evolution in the
RT   Chamaeleonidae (Reptilia, Squamata).";
RL   Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AF448757; AAL90553.1; -.
KW   Mitochondrion.
FT   NON_TER       9      9
SQ   SEQUENCE   9 AA;  1205 MW;  358CB72733640733 CRC64;

  Query Match             64.5%;  Score 20;  DB 8;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          2 WLRW 5


RESULT 4
O77919
ID   O77919      PRELIMINARY;      PRT;     12 AA.
AC   O77919;
DT   01-NOV-1998 (TrEMBLrel. 08, Created)
DT   01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   MHC class II B locus 4 (Fragment).
OS   Pseudotropheus sp. 'Pseudotropheus tropheops complex'.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC   Cichlidae; Pseudotropheus.
OX   NCBI_TaxID=51796;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=98315113; PubMed=9649539;
RA   Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA   Figueroa F., Sultmann H., Klein J.;
RT   "Linkage relationships and haplotype polymorphism among cichlid mhc
RT   class II B loci.";
RL   Genetics 149:1527-1537(1998).
DR   EMBL; AF050032; AAC41371.1; -.
FT   NON_TER       1      1
FT   NON_TER      12     12
SQ   SEQUENCE   12 AA;  1529 MW;  6C2ABFACD5A5B734 CRC64;

  Query Match             64.5%;  Score 20;  DB 7;  Length 12;
  Best Local Similarity   50.0%;  Pred. No. 1.7e+03;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          1 WDFW 4


RESULT 5
Q16406
ID   Q16406      PRELIMINARY;      PRT;     13 AA.
AC   Q16406;
DT   01-NOV-1996 (TrEMBLrel. 01, Created)
DT   01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT   01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
DE   GHRH-R protein (Fragment).
GN   GHRH-R.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=96001284; PubMed=7559877;
RA   Hashimoto K., Koga M., Motomura T., Kasayama S., Kouhara H.,
RA   Ohnishi T., Arita N., Hayakawa T., Sato B., Kishimoto T.;
RT   "Identification of alternatively spliced messenger ribonucleic acid
RT   encoding truncated growth hormone-releasing hormone receptor in human
RT   pituitary adenomas.";
RL   J. Clin. Endocrinol. Metab. 80:2933-2939(1995).
DR   EMBL; S79912; AAD14318.1; -.
FT   NON_TER       1      1
SQ   SEQUENCE   13 AA;  1612 MW;  CE19D7D255D66362 CRC64;

  Query Match             64.5%;  Score 20;  DB 4;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+03;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          7 WGYW 10


RESULT 6
Q53580
ID   Q53580      PRELIMINARY;      PRT;     15 AA.
AC   Q53580;
DT   01-NOV-1996 (TrEMBLrel. 01, Created)
DT   01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Light-harvesting complex I alpha polypeptide (Fragment).
GN   PUFA.
OS   Rhodobacter capsulatus (Rhodopseudomonas capsulata).
OC   Bacteria; Proteobacteria; Alphaproteobacteria; Rhodobacterales;
OC   Rhodobacteraceae; Rhodobacter.
OX   NCBI_TaxID=1061;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92234963; PubMed=1569029;
RA   Richter P., Brand M., Drews G.;
RT   "Characterization of LHI- and LHI+ Rhodobacter capsulatus pufA
RT   mutants.";
```

```
RL   J. Bacteriol. 174:3030-3041(1992).
DR   EMBL; S97552; AAC60406.1; -.
FT   NON_TER       15      15
SQ   SEQUENCE   15 AA;  2054 MW;  3561FE413591D31A CRC64;

  Query Match             64.5%;  Score 20;  DB 2;  Length 15;
  Best Local Similarity   50.0%;  Pred. No. 2e+03;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          8 WKIW 11


RESULT 7
Q94VC1
ID   Q94VC1      PRELIMINARY;      PRT;     8 AA.
AC   Q94VC1;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Varanus rudicollis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OX   NCBI_TaxID=169851;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407521; AAL10116.1; -.
KW   Mitochondrion.
FT   NON_TER       8       8
SQ   SEQUENCE   8 AA;  1053 MW;  FE2729D5A36411A6 CRC64;

  Query Match             54.8%;  Score 17;  DB 8;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          4 WSF 6


RESULT 8
Q94V77
ID   Q94V77      PRELIMINARY;      PRT;     11 AA.
AC   Q94V77;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Heloderma suspectum (Gila monster).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Helodermatidae;
OC   Heloderma.
OX   NCBI_TaxID=8554;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407540; AAL10172.1; -.
KW   Mitochondrion.
FT   NON_TER      11      11
SQ   SEQUENCE   11 AA;  1396 MW;  8E3A6DE0D5A36411 CRC64;

  Query Match             54.8%;  Score 17;  DB 8;  Length 11;
  Best Local Similarity   66.7%;  Pred. No. 4.8e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          6 WSF 8


RESULT 9
Q9UDC6
ID   Q9UDC6      PRELIMINARY;      PRT;     13 AA.
AC   Q9UDC6;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE   ENDOTHELIUM-derived RELATING factor, nitric oxide synthase
DE   (Fragment).
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=93054573; PubMed=1385404;
RA   Janssens S.P., Simouchi A., Quertermous T., Bloch D.B., Bloch K.D.;
RT   "Cloning and expression of a cDNA encoding human endothelium-derived
RT   relating factor/nitric oxide synthase.";
RL   J. Biol. Chem. 267:22694-22694(1992).
FT   NON_TER       1       1
FT   NON_TER      13      13
SQ   SEQUENCE   13 AA;  1390 MW;  3231B6DFEC7EB867 CRC64;

  Query Match             54.8%;  Score 17;  DB 4;  Length 13;
  Best Local Similarity   66.7%;  Pred. No. 5.5e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          1 WAF 3


RESULT 10
Q9SAP8
ID   Q9SAP8      PRELIMINARY;      PRT;     14 AA.
AC   Q9SAP8;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE   LHCPII (14AA) (Fragment).
OS   Pisum sativum (Garden pea).
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
OC   eurosids I; Fabales; Fabaceae; Papilionoideae; Vicieae; Pisum.
OX   NCBI_TaxID=3888;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=var. Alaska;
RA   Dobres M.S., Abler M.L., Thompson W.F.;
RT   "Sequence of the 3' untranslated region of a pea.";
RL   Nucleic Acids Res. 0:0-0(1988).
DR   EMBL; X06822; CAA29970.1; -.
FT   NON_TER       1       1
SQ   SEQUENCE   14 AA;  1537 MW;  D55621E9906EA7AD CRC64;

  Query Match             54.8%;  Score 17;  DB 10;  Length 14;
  Best Local Similarity   66.7%;  Pred. No. 5.8e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          4 WAF 6
```

```
RESULT 11
Q94VF6
ID   Q94VF6      PRELIMINARY;      PRT;     8 AA.
AC   Q94VF6;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Varanus jobiensis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OX   NCBI_TaxID=169843;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407507; AAL10075.1; -.
KW   Mitochondrion.
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1144 MW;  EFD729DB436411A6 CRC64;

  Query Match             51.6%;  Score 16;  DB 8;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          4 WYF 6


RESULT 12
Q8WGD7
ID   Q8WGD7      PRELIMINARY;      PRT;     8 AA.
AC   Q8WGD7;
DT   01-MAR-2002 (TrEMBLrel. 20, Created)
DT   01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT   01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE   Cytochrome oxidase subunit 1 (Fragment).
OS   Lomis hirta.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
OC   Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Anomura; Lomoidea;
OC   Lomidae; Lomis.
OX   NCBI_TaxID=177234;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Morrison C.L., Harvey A.W., Lavery S., Tieu K., Huang Y.,
RA   Cunningham C.W.;
RT   "Mitochondrial gene rearrangements support a hypothesis of parallel
RT   evolution to the crab-like form.";
RL   Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AF436035; AAL31611.1; -.
KW   Mitochondrion.
FT   NON_TER       1      1
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1038 MW;  C5B5B9C733640321 CRC64;

  Query Match             51.6%;  Score 16;  DB 8;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          4 WLF 6


RESULT 13
Q94V88
ID   Q94V88      PRELIMINARY;      PRT;     8 AA.
AC   Q94V88;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Varanus tristis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OX   NCBI_TaxID=62052;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407533; AAL10151.1; -.
KW   Mitochondrion.
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1041 MW;  E8B5B9C7336411A6 CRC64;

  Query Match             51.6%;  Score 16;  DB 8;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          4 WLF 6


RESULT 14
Q9TD02
ID   Q9TD02      PRELIMINARY;      PRT;     8 AA.
AC   Q9TD02;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
OS   Terranatos dolichopterus.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
OC   Cyprinodontiformes; Aplocheilidae; Rivulinae; Terranatos.
OX   NCBI_TaxID=61836;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Hrbek T., Larson A.;
RT   "The evolution of diapause in the killifish family Rivulidae
RT   (Atherinomorpha, Cyprinodontiformes): A molecular phylogenetic and
RT   biogeographic perspective.";
RL   Evolution 53:1200-1216(1999).
DR   EMBL; AF092421; AAF03041.1; -.
KW   Mitochondrion.
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1084 MW;  F0C9D3640DD44056 CRC64;

  Query Match             51.6%;  Score 16;  DB 8;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          6 WFF 8


RESULT 15
Q9T4Y2
ID   Q9T4Y2      PRELIMINARY;      PRT;     8 AA.
AC   Q9T4Y2;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE   COI gene product (Fragment).
```

```
OS   Asterina pectinifera (Starfish).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Asterozoa;
OC   Asteroidea; Valvatacea; Valvatida; Asterinidae; Asterina.
OX   NCBI_TaxID=7594;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=89354669; PubMed=2766382;
RA   Jacobs H.T., Asakawa S., Araki T., Miura K., Smith M.J., Watanabe K.;
RT   "Conserved tRNA gene cluster in starfish mitochondrial DNA.";
RL   Curr. Genet. 15:193-206(1989).
DR   EMBL; X16886; CAA34767.1; -.
KW   Mitochondrion.
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1114 MW;  F0C9D36415B736D6 CRC64;

  Query Match             51.6%;  Score 16;  DB 8;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          6 WFF 8


Search completed: December  3, 2003, 11:53:24
Job time : 27.3333 secs
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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:44:55 ; Search time 7.33333 Seconds
(without alignments)
38.476 Million cell updates/sec

Title: US-09-912-414-9
Perfect score: 31
Sequence: 1 WXXWXF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 795

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_41:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	21	67.7	10	1	LABA_JATMU	P13270 jatropha mu
2	19	61.3	9	1	COW_CONVE	P83047 conus ventr
3	14	45.2	9	1	LITR_PHYRO	P08946 phyllomedus
4	14	45.2	10	1	GON1_ALLMI	P37041 alligator m
5	14	45.2	10	1	GON3_ONCKE	P20367 oncorhynchu
6	14	45.2	11	1	RANC_RANPI	P08951 rana pipien
7	13	41.9	8	1	RT34_BOVIN	P82929 bos taurus
8	13	41.9	9	1	LITO_LITAU	P08945 litoria aur
9	13	41.9	10	1	HTF_TABAT	P14596 tabanus atr
10	13	41.9	12	1	UR2A_CATCO	P04558 catostomus
11	13	41.9	12	1	UR2B_CATCO	P04559 catostomus
12	13	41.9	12	1	UR2B_CYPCA	P04561 cyprinus ca
13	13	41.9	12	1	UR2_GILMI	P01147 gillichthys
14	13	41.9	12	1	UR2_POLSP	P81022 polyodon sp
15	13	41.9	12	1	UR2_SCYCA	P35490 scyliorhinu
16	13	41.9	13	1	BOML_PSEGU	P42991 pseudophryn
17	12	38.7	6	1	LOK1_LOCMI	P41491 locusta mig
18	12	38.7	8	1	LCK2_LEUMA	P21141 leucophaea
19	12	38.7	8	1	LCK5_LEUMA	P19987 leucophaea
20	12	38.7	8	1	LCK7_LEUMA	P19989 leucophaea
21	12	38.7	10	1	AEGL_AGRAE	P83465 agrocybe ae
22	12	38.7	10	1	CA12_LITCI	P82086 litoria cit
23	12	38.7	10	1	CAER_LITXA	P56264 litoria xan
24	12	38.7	10	1	GON1_CHEPR	P80677 chelyosoma
25	12	38.7	13	1	YPNP_PHOLU	P41122 photorhabdu
26	12	38.7	15	1	RM12_YEAST	P36522 saccharomyc
27	11	35.5	4	1	OCP3_OCTMI	P58649 octopus min
28	11	35.5	5	1	BPP7_BOTIN	P30425 bothrops in
29	11	35.5	5	1	UF01_MOUSE	P38639 mus musculu
30	11	35.5	6	1	EI01_LITRU	P82096 litoria rub
31	11	35.5	7	1	BRHP_CONIM	P58803 conus imper
32	11	35.5	7	1	TPFY_PACDA	P83455 pachymedusa
33	11	35.5	7	1	TY51_LITRU	P82065 litoria rub
34	11	35.5	7	1	WWA1_ACHFU	P35919 achatina fu
35	11	35.5	7	1	WWA2_ACHFU	P35920 achatina fu
36	11	35.5	7	1	WWA3_ACHFU	P35921 achatina fu
37	11	35.5	8	1	ACI_THUAL	P18691 thunnus alb
38	11	35.5	8	1	AKHG_GRYBI	P14086 gryllus bim
39	11	35.5	8	1	AKH_LIBAU	P25418 libellula a
40	11	35.5	8	1	AKH_MELML	P25423 melolontha
41	11	35.5	8	1	AKH_TABAT	P14595 tabanus atr
42	11	35.5	8	1	CCKN_MACEU	P30369 macropus eu
43	11	35.5	8	1	COW2_CONPU	P58785 conus purpu
44	11	35.5	8	1	HTF1_PERAM	P04548 periplaneta
45	11	35.5	8	1	HTF2_PERAM	P04549 periplaneta

ALIGNMENTS

RESULT 1
LABA_JATMU
ID LABA_JATMU STANDARD; PRT; 10 AA.
AC P13270;
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Labaditin.
OS Jatropha multifida (Physic nut).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
OC eurosids I; Malpighiales; Euphorbiaceae; Jatropha.
OX NCBI_TaxID=3996;
RN [1]
RP SEQUENCE.
RC TISSUE=Latex;
RA Kosasi S., van der Sluis W.G., Boelens R., T'Hart L.A., Labadie R.P.;
RT "Labaditin, a novel cyclic decapeptide from the latex of Jatropha
RT multifida L. (Euphorbiaceae). Isolation and sequence determination
RT by means of two-dimensional NMR.";
RL FEBS Lett. 256:91-96(1989).
CC -!- FUNCTION: LABADITIN IS AN ACTIVE PEPTIDE WHICH INHIBITS THE
CC CLASSICAL PATHWAY OF COMPLEMENT ACTIVATION IN VITRO. ACTIVITY
CC SEEMS TO BE BASED ON AN INTERACTION WITH C1.
CC -!- PTM: This is a cyclic peptide.
CC -!- DISEASE: LATEX OF THIS PLANT IS USED IN FOLKLORIC MEDICINE FOR
CC TREATMENT OF INFECTED WOUNDS, SKINS INFECTIONS AND SCABIES.
SQ SEQUENCE 10 AA; 1089 MW; D98AAD6362D1B362 CRC64;

Query Match 67.7%; Score 21; DB 1; Length 10;
Best Local Similarity 50.0%; Pred. No. 1.7e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy          1 WXXW 4
              |  |
Db          4 WTVW 7
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RESULT 2
COW_CONVE
ID COW_CONVE STANDARD; PRT; 9 AA.
AC P83047;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Contryphan-Vn.
OS Conus ventricosus (Mediterranean cone).
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=117992;
RN [1]
RP SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY.
RC TISSUE=Venom;
RX MEDLINE=21547785; PubMed=11688995;
RA Massilia G.R., Schinina M.E., Ascenzi P., Polticelli F.;

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RT   "Contryphan-Vn: a novel peptide from the venom of the Mediterranean
RT   snail Conus ventricosus.";
RL   Biochem. Biophys. Res. Commun. 288:908-913(2001).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC   -!- MASS SPECTROMETRY: MW=1088.6; METHOD=MALDI.
CC   -!- SIMILARITY: BELONGS TO THE CONTRYPHAN FAMILY.
KW   Toxin; Amidation; D-amino acid.
FT   DISULFID      3      9
FT   MOD_RES       5      5       D-TRYPTOPHAN.
FT   MOD_RES       9      9       AMIDATION.
SQ   SEQUENCE   9 AA;  1091 MW;  8D38676323676EBA CRC64;

  Query Match             61.3%;  Score 19;  DB 1;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              | | :
Db          5 WKPW 8


RESULT 3
LITR_PHYRO
ID   LITR_PHYRO     STANDARD;      PRT;     9 AA.
AC   P08946;
DT   01-NOV-1988 (Rel. 09, Created)
DT   01-FEB-1994 (Rel. 28, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Rhodei-litorin.
OS   Phyllomedusa rohdei (Rohde's leaf frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Phyllomedusinae; Phyllomedusa.
OX   NCBI_TaxID=8394;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=85127560; PubMed=3838283;
RA   Barra D., Erspamer G.F., Simmaco M., Bossa F., Melchiorri P.,
RA   Erspamer V.;
RT   "Rohdei-litorin: a new peptide from the skin of Phyllomedusa rohdei.";
RL   FEBS Lett. 182:53-56(1985).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   PIR; S07241; S07241.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES       9      9       AMIDATION.
SQ   SEQUENCE   9 AA;  1090 MW;  4ECCC1E861ADC377 CRC64;

  Query Match             45.2%;  Score 14;  DB 1;  Length 9;
  Best Local Similarity   33.3%;  Pred. No. 1.3e+05;
  Matches    2;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |    |
Db          3 WATGHF 8


RESULT 4
GON1_ALLMI
ID   GON1_ALLMI     STANDARD;      PRT;     10 AA.
AC   P37041; P20407;
DT   01-FEB-1991 (Rel. 17, Created)
DT   01-FEB-1991 (Rel. 17, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Gonadoliberin I (Gonadotropin-releasing hormone I) (GnRH-I) (LH-RH I)
DE   (Luliberin I).
OS   Alligator mississippiensis (American alligator).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Archosauria; Crocodylidae; Alligatorinae; Alligator.
OX   NCBI_TaxID=8496;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Brain;
RX   MEDLINE=91352338; PubMed=1882082;
RA   Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.E., Park M.,
RA   Lance V., Swanson P., Rivier J.E., Sherwood N.M.;
RT   "Primary structure of two forms of gonadotropin-releasing hormone
RT   from brains of the American alligator (Alligator mississippiensis).";
RL   Regul. Pept. 33:105-116(1991).
CC   -!- FUNCTION: Stimulates the secretion of gonadotropins.
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- SIMILARITY: Belongs to the GNRH family.
DR   PIR; A60066; RHAQ1.
DR   InterPro; IPR002012; GnRH.
DR   Pfam; PF00446; GnRH; 1.
DR   PROSITE; PS00473; GNRH; 1.
KW   Hormone; Amidation; Hypothalamus; Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES      10     10       AMIDATION.
SQ   SEQUENCE   10 AA;  1172 MW;  284B23D7286B45A3 CRC64;

  Query Match             45.2%;  Score 14;  DB 1;  Length 10;
  Best Local Similarity   33.3%;  Pred. No. 2.4e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          3 WSY 5


RESULT 5
GON3_ONCKE
ID   GON3_ONCKE     STANDARD;      PRT;     10 AA.
AC   P20367; P81751;
DT   01-FEB-1991 (Rel. 17, Created)
DT   01-FEB-1991 (Rel. 17, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Gonadoliberin III (Gonadotropin-releasing hormone III) (GnRH-III) (LH-
DE   RH III) (Luliberin III).
GN   GNRH3.
OS   Oncorhynchus keta (Chum salmon), and
OS   Clupea pallasii (Pacific herring).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC   Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX   NCBI_TaxID=8018, 30724;
RN   [1]
RP   SEQUENCE.
RC   SPECIES=O.keta;
RX   MEDLINE=83195140; PubMed=6341999;
RA   Sherwood N., Eiden L., Brownstein M., Spiess J., Rivier J., Vale W.;
RT   "Characterization of a teleost gonadotropin-releasing hormone.";
RL   Proc. Natl. Acad. Sci. U.S.A. 80:2794-2798(1983).
RN   [2]
RP   SEQUENCE, AND FUNCTION.
RC   SPECIES=C.pallasii; TISSUE=Brain, and Pituitary;
RX   MEDLINE=20114351; PubMed=10650929;
RA   Carolsfeld J., Powell J.F.F., Park M., Fischer W.H., Craig A.G.,
RA   Chang J.P., Rivier J.E., Sherwood N.M.;
RT   "Primary structure and function of three gonadotropin-releasing
RT   hormones, including a novel form, from an ancient teleost, herring.";
RL   Endocrinology 141:505-512(2000).
CC   -!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates
CC       the secretion of both luteinizing and follicle-stimulating
CC       hormones.
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- SIMILARITY: Belongs to the GNRH family.
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DR   PIR; A21114; A21114.
DR   InterPro; IPR002012; GnRH.
DR   Pfam; PF00446; GnRH; 1.
DR   PROSITE; PS00473; GNRH; 1.
KW   Hormone; Amidation; Hypothalamus; Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES      10     10       AMIDATION.
SQ   SEQUENCE   10 AA;  1230 MW;  284B3233786B45A3 CRC64;

  Query Match             45.2%;  Score 14;  DB 1;  Length 10;
  Best Local Similarity   33.3%;  Pred. No. 2.4e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          3 WSY 5


RESULT 6
RANC_RANPI
ID   RANC_RANPI     STANDARD;      PRT;     11 AA.
AC   P08951;
DT   01-NOV-1988 (Rel. 09, Created)
DT   01-NOV-1988 (Rel. 09, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Ranatensin-C.
OS   Rana pipiens (Northern leopard frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=8404;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=84131098; PubMed=6141890;
RA   Nakajima T.;
RL   Unpublished results, cited by:
RL   Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
RL   Comp. Biochem. Physiol. 77C:99-108(1984).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation.
FT   MOD_RES      11     11       AMIDATION.
SQ   SEQUENCE   11 AA;  1304 MW;  D6C9885A61ADC366 CRC64;

  Query Match             45.2%;  Score 14;  DB 1;  Length 11;
  Best Local Similarity   33.3%;  Pred. No. 2.6e+03;
  Matches    2;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |   |
Db          5 WATGHF 10


RESULT 7
RT34_BOVIN
ID   RT34_BOVIN     STANDARD;      PRT;     8 AA.
AC   P82929;
DT   28-FEB-2003 (Rel. 41, Created)
DT   28-FEB-2003 (Rel. 41, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Mitochondrial 28S ribosomal protein S34 (S34mt) (MRP-S34) (Fragment).
GN   MRPS34.
OS   Bos taurus (Bovine).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC   Bovidae; Bovinae; Bos.
OX   NCBI_TaxID=9913;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Liver;
RX   MEDLINE=21276436; PubMed=11279123;
RA   Koc E.C., Burkhart W., Blackburn K., Moseley A., Spremulli L.L.;
RT   "The small subunit of the mammalian mitochondrial ribosome:
RT   identification of the full complement of ribosomal proteins present.";
RL   J. Biol. Chem. 276:19363-19374(2001).
CC   -!- SUBUNIT: Component of the mitochondrial ribosome small subunit
CC       (28S) which comprises a 12S rRNA and about 30 distinct proteins.
CC   -!- SUBCELLULAR LOCATION: Mitochondrial.
KW   Ribosomal protein; Mitochondrion.
FT   NON_TER       1      1
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  935 MW;  9639D1A72058637D CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 8;
  Best Local Similarity   33.3%;  Pred. No. 1.3e+05;
  Matches    2;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |   |
Db          2 WGILTF 7


RESULT 8
LITO_LITAU
ID   LITO_LITAU     STANDARD;      PRT;     9 AA.
AC   P08945;
DT   01-NOV-1988 (Rel. 09, Created)
DT   01-FEB-1994 (Rel. 28, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Litorin.
OS   Litoria aurea (Green and golden bell frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Pelodryadinae; Litoria.
OX   NCBI_TaxID=8371;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=75187011; PubMed=1140241;
RA   Anastasi A., Erspamer V., Endean R.;
RT   "Aminoacid composition and sequence of litorin, a bombesin-like
RT   nonapeptide from the skin of the Australian leptodactylid frog
RT   Litoria aurea.";
RL   Experientia 31:510-511(1975).
RN   [2]
RP   SEQUENCE (METHYLATED VARIANT).
RC   TISSUE=Skin secretion;
RX   MEDLINE=78003546; PubMed=908397;
RA   Anastasi A., Montecucchi P.C., Angelucci F., Erspamer V., Endean R.;
RT   "Glu(OMe)3-litorin, the second bombesin-like peptide occurring in
RT   methanol extracts of the skin of the Australian frog Litoria aurea.";
RL   Experientia 33:1289-1289(1977).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   PIR; S07204; S07204.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation; Methylation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES       2      2       METHYLATION (PARTIAL).
FT   MOD_RES       9      9       AMIDATION.
SQ   SEQUENCE   9 AA;  1103 MW;  D7CCC1E862CDC366 CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 9;
  Best Local Similarity   33.3%;  Pred. No. 1.3e+05;
  Matches    2;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;
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Qy          1 WXXWXF 6
              |   |
Db          3 WAVGHF 8


RESULT 9
HTF_TABAT
ID   HTF_TABAT      STANDARD;      PRT;    10 AA.
AC   P14596;
DT   01-JAN-1990 (Rel. 13, Created)
DT   01-FEB-1994 (Rel. 28, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Hypertrehalosaemic factor (HOTH) (Dipteran corpora cardiaca factor II)
DE   (DCC II).
OS   Tabanus atratus (Horse fly).
OC   Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC   Neoptera; Endopterygota; Diptera; Brachycera; Tabanomorpha; Tabanidae;
OC   Tabanus.
OX   NCBI_TaxID=7207;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Corpora cardiaca;
RX   MEDLINE=90046758; PubMed=2813385;
RA   Jaffe H., Raina A.K., Riley C.T., Fraser B.A., Nachman R.J.,
RA   Vogel V.W., Zhang Y.-S., Hayes D.K.;
RT   "Primary structure of two neuropeptide hormones with adipokinetic and
RT   hypotrehalosemic activity isolated from the corpora cardiaca of horse
RT   flies (Diptera).";
RL   Proc. Natl. Acad. Sci. U.S.A. 86:8161-8164(1989).
CC   -!- FUNCTION: HYPERTREHALOSAEMIC FACTORS ARE NEUROPEPTIDES THAT
CC       ELEVATE THE LEVEL OF TREHALOSE IN THE HEMOLYMPH (TREHALOSE IS
CC       THE MAJOR CARBOHYDRATE IN THE HEMOLYMPH OF INSECTS).
CC   -!- SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.
DR   PIR; B33995; B33995.
DR   InterPro; IPR002047; AKH.
DR   PROSITE; PS00256; AKH; 1.
KW   Neuropeptide; Amidation; Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES      10     10       AMIDATION.
SQ   SEQUENCE   10 AA;  1169 MW;  916036786771A9D1 CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 10;
  Best Local Similarity   33.3%;  Pred. No. 3.5e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          8 WGY 10


RESULT 10
UR2A_CATCO
ID   UR2A_CATCO     STANDARD;      PRT;    12 AA.
AC   P04558;
DT   13-AUG-1987 (Rel. 05, Created)
DT   13-AUG-1987 (Rel. 05, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Urotensin IIA (U-IIA) (UIIA).
OS   Catostomus commersoni (White sucker).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC   Catostomidae; Catostomus.
OX   NCBI_TaxID=7971;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=84041959; PubMed=6138758;
RA   McMaster D., Lederis K.;
RT   "Isolation and amino acid sequence of two urotensin II peptides from
RT   Catostomus commersoni urophyses.";
RL   Peptides 4:367-373(1983).
CC   -!- FUNCTION: UROTENSIN IS FOUND IN THE TELEOST CAUDAL NEUROSECRETORY
CC       SYSTEM. IT HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A
CC       CORTICOTROPIN-RELEASING FACTOR.
CC   -!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY.
DR   PIR; JS0423; JS0423.
DR   InterPro; IPR001483; Urotensin_II.
DR   Pfam; PF02083; Urotensin_II; 1.
DR   PROSITE; PS00984; UROTENSIN_II; 1.
KW   Hormone.
FT   DISULFID      6     11
SQ   SEQUENCE   12 AA;  1336 MW;  969C76DBB879CEBA CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 12;
  Best Local Similarity   33.3%;  Pred. No. 4e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          8 WKY 10


RESULT 11
UR2B_CATCO
ID   UR2B_CATCO     STANDARD;      PRT;    12 AA.
AC   P04559;
DT   13-AUG-1987 (Rel. 05, Created)
DT   13-AUG-1987 (Rel. 05, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Urotensin IIB (U-IIB) (UIIB).
OS   Catostomus commersoni (White sucker).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC   Catostomidae; Catostomus.
OX   NCBI_TaxID=7971;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=84041959; PubMed=6138758;
RA   McMaster D., Lederis K.;
RT   "Isolation and amino acid sequence of two urotensin II peptides from
RT   Catostomus commersoni urophyses.";
RL   Peptides 4:367-373(1983).
CC   -!- FUNCTION: UROTENSIN IS FOUND IN THE TELEOST CAUDAL NEUROSECRETORY
CC       SYSTEM. IT HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A
CC       CORTICOTROPIN-RELEASING FACTOR.
CC   -!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY.
DR   PIR; JS0424; JS0424.
DR   InterPro; IPR001483; Urotensin_II.
DR   Pfam; PF02083; Urotensin_II; 1.
DR   PROSITE; PS00984; UROTENSIN_II; 1.
KW   Hormone.
FT   DISULFID      6     11
SQ   SEQUENCE   12 AA;  1437 MW;  73961BDBB879CEBB CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 12;
  Best Local Similarity   33.3%;  Pred. No. 4e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          8 WKY 10


RESULT 12
UR2B_CYPCA
ID   UR2B_CYPCA     STANDARD;      PRT;    12 AA.
AC   P04561;
DT   13-AUG-1987 (Rel. 05, Created)
DT   13-AUG-1987 (Rel. 05, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Urotensin II-beta.
OS   Cyprinus carpio (Common carp).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC   Cyprinidae; Cyprinus.
OX   NCBI_TaxID=7962;
RN   [1]
```

```
RP   SEQUENCE.
RA   Munekata E., Ohtaki T., Ichikawa T., McMaster D., Lederis K.;
RL   (In) Rich D.H., Gross E. (eds.);
RL   Proceedings of the 7th american peptide symposium, pp.69-72,
RL   Pierce Chemical Co., Rockford Il. (1981).
CC   -!- FUNCTION: UROTENSIN IS FOUND IN THE TELEOST CAUDAL NEUROSECRETORY
CC       SYSTEM. IT HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A
CC       CORTICOTROPIN-RELEASING FACTOR.
CC   -!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY.
DR   InterPro; IPR001483; Urotensin_II.
DR   Pfam; PF02083; Urotensin_II; 1.
DR   PROSITE; PS00984; UROTENSIN_II; 1.
KW   Hormone.
FT   DISULFID      6     11
FT   VARIANT       2      2       G -> S.
SQ   SEQUENCE   12 AA;  1407 MW;  73960A9FB879CEBB CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 12;
  Best Local Similarity   33.3%;  Pred. No. 4e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          8 WKY 10


RESULT 13
UR2_GILMI
ID   UR2_GILMI      STANDARD;      PRT;    12 AA.
AC   P01147;
DT   21-JUL-1986 (Rel. 01, Created)
DT   21-JUL-1986 (Rel. 01, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Urotensin II (U-II) (UII).
OS   Gillichthys mirabilis (Long-jawed mudsucker).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Gobioidei;
OC   Gobiidae; Gillichthys.
OX   NCBI_TaxID=8222;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=81054904; PubMed=6107911;
RA   Pearson D., Shively J.E., Clark B.R., Geschwind I.I., Barkley M.,
RA   Nishioka R., Bern H.A.;
RT   "Urotensin II: a somatostatin-like peptide in the caudal
RT   neurosecretory system of fishes.";
RL   Proc. Natl. Acad. Sci. U.S.A. 77:5021-5024(1980).
CC   -!- FUNCTION: UROTENSIN IS FOUND IN THE TELEOST CAUDAL NEUROSECRETORY
CC       SYSTEM. IT HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A
CC       CORTICOTROPIN-RELEASING FACTOR.
CC   -!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY.
DR   PIR; A01409; UOGM2.
DR   PIR; S42765; S42765.
DR   InterPro; IPR001483; Urotensin_II.
DR   Pfam; PF02083; Urotensin_II; 1.
DR   PROSITE; PS00984; UROTENSIN_II; 1.
KW   Hormone.
FT   DISULFID      6     11
SQ   SEQUENCE   12 AA;  1364 MW;  968BF8982679CEBA CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 12;
  Best Local Similarity   33.3%;  Pred. No. 4e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          8 WKY 10


RESULT 14
UR2_POLSP
ID   UR2_POLSP      STANDARD;      PRT;    12 AA.
AC   P81022;
DT   01-NOV-1997 (Rel. 35, Created)
DT   01-NOV-1997 (Rel. 35, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Urotensin II (U-II) (UII).
OS   Polyodon spathula (North American paddlefish).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Chondrostei; Acipenseriformes; Polyodontidae;
OC   Polyodon.
OX   NCBI_TaxID=7913;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spinal cord;
RX   MEDLINE=96051494; PubMed=8536944;
RA   Waugh D., Youson J., Mims S.D., Sower S., Conlon J.M.;
RT   "Urotensin II from the river lamprey (Lampetra fluviatilis), the sea
RT   lamprey (Petromyzon marinus), and the paddlefish (Polyodon
RT   spathula).";
RL   Gen. Comp. Endocrinol. 99:323-332(1995).
CC   -!- FUNCTION: HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A
CC       CORTICOTROPIN-RELEASING FACTOR. PROBABLY INVOLVED IN SMOOTH
CC       MUSCLE STIMULATION.
CC   -!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY.
DR   InterPro; IPR001483; Urotensin_II.
DR   Pfam; PF02083; Urotensin_II; 1.
DR   PROSITE; PS00984; UROTENSIN_II; 1.
KW   Hormone.
FT   DISULFID      6     11       BY SIMILARITY.
SQ   SEQUENCE   12 AA;  1410 MW;  7551E9DBB879CEBB CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 12;
  Best Local Similarity   33.3%;  Pred. No. 4e+03;
  Matches    1;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | :
Db          8 WKY 10


RESULT 15
UR2_SCYCA
ID   UR2_SCYCA      STANDARD;      PRT;    12 AA.
AC   P35490;
DT   01-JUN-1994 (Rel. 29, Created)
DT   01-JUN-1994 (Rel. 29, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Urotensin II (U-II) (UII).
OS   Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC   Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
OC   Scyliorhinidae; Scyliorhinus.
OX   NCBI_TaxID=7830;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Spinal cord;
RX   MEDLINE=92319231; PubMed=1620290;
RA   Conlon J.M., O'Harte F., Smith D.D., Balment R.J., Hazon N.;
RT   "Purification and characterization of urotensin II and parvalbumin
RT   from an elasmobranch fish, Scyliorhinus canicula (common dogfish).";
RL   Neuroendocrinology 55:230-235(1992).
CC   -!- FUNCTION: HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A
CC       CORTICOTROPIN-RELEASING FACTOR. PROBABLY INVOLVED IN SMOOTH
CC       MUSCLE STIMULATION.
CC   -!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY.
DR   InterPro; IPR001483; Urotensin_II.
DR   Pfam; PF02083; Urotensin_II; 1.
DR   PROSITE; PS00984; UROTENSIN_II; 1.
KW   Hormone.
FT   DISULFID      6     11
SQ   SEQUENCE   12 AA;  1526 MW;  804729F9D579CEBA CRC64;

  Query Match             41.9%;  Score 13;  DB 1;  Length 12;
  Best Local Similarity   33.3%;  Pred. No. 4e+03;
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Matches 1; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy          4 WXF 6
              | :
Db          8 WKY 10
```

Search completed: December 3, 2003, 11:51:51
Job time : 7.33333 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:48:35 ; Search time 11 Seconds
(without alignments)
52.456 Million cell updates/sec

Title: US-09-912-414-9
Perfect score: 31
Sequence: 1 WXXWXF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 2520

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	21	67.7	9	2	A43848	cell surface adhes
2	20	64.5	10	2	F49033	T-cell receptor ga
3	20	64.5	12	2	PH1324	Ig heavy chain DJ
4	20	64.5	12	2	PH1308	Ig heavy chain DJ
5	20	64.5	13	2	S61798	T-cell-specific tr
6	20	64.5	14	2	PH1322	Ig heavy chain DJ
7	17	54.8	13	2	S23372	T-cell receptor al
8	17	54.8	13	2	B25448	Ig kappa-1 chain,
9	17	54.8	13	2	B26406	Ig kappa chain J r
10	17	54.8	13	2	A47630	Ig kappa chain J r
11	16	51.6	8	2	T13818	cytochrome oxidase
12	16	51.6	10	2	T17054	cytochrome-c oxida
13	16	51.6	10	2	T13976	cytochrome-c oxida
14	16	51.6	10	2	T17057	cytochrome-c oxida
15	16	51.6	10	2	T12303	cytochrome-c oxida
16	16	51.6	10	2	T14019	cytochrome-c oxida
17	16	51.6	10	2	T17060	cytochrome-c oxida
18	16	51.6	10	2	T17063	cytochrome-c oxida
19	16	51.6	10	2	T12325	cytochrome-c oxida
20	16	51.6	10	2	T14043	cytochrome-c oxida
21	16	51.6	10	2	T14054	cytochrome-c oxida
22	16	51.6	10	2	T17066	cytochrome-c oxida
23	16	51.6	10	2	T17069	cytochrome-c oxida
24	16	51.6	10	2	T12308	cytochrome-c oxida
25	16	51.6	10	2	T17072	cytochrome-c oxida
26	16	51.6	10	2	T12312	cytochrome-c oxida
27	16	51.6	10	2	T12329	cytochrome-c oxida
28	16	51.6	10	2	T12316	cytochrome-c oxida
29	16	51.6	10	2	T12321	cytochrome-c oxida
30	16	51.6	10	2	T14215	cytochrome-c oxida
31	16	51.6	10	2	T14223	cytochrome-c oxida
32	16	51.6	10	2	T14219	cytochrome-c oxida
33	16	51.6	12	2	A29169	phospholipase A2 (
34	16	51.6	14	2	PT0077	proteochondoitin c
35	16	51.6	15	2	PA0099	phenotipic variati
36	15	48.4	9	2	S56004	glucan 1,3-beta-gl
37	15	48.4	15	2	S24159	leukocyte elastase
38	14	45.2	9	2	S07241	litorin - Rohde's
39	14	45.2	10	1	RHPGG	gonadoliberin - pi
40	14	45.2	10	1	RHSHG	gonadoliberin - sh
41	14	45.2	10	1	RHAQ1	gonadoliberin I -
42	14	45.2	10	2	A21114	gonadoliberin - ch
43	14	45.2	11	2	S68649	spermadhesin AQN-3
44	14	45.2	15	2	PH1365	Ig heavy chain DJ
45	13	41.9	9	2	S07205	litorin 2-Glu - Au

ALIGNMENTS

RESULT 1
A43848
cell surface adhesin for heparan sulfate, 66K - Staphylococcus aureus (fragment)
C;Species: Staphylococcus aureus
C;Date: 10-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 24-Feb-1995
C;Accession: A43848
R;Liang, O.D.; Ascencio, F.; Fransson, L.A.; Wadstrom, T.
Infect. Immun. 60, 899-906, 1992
A;Title: Binding of heparan sulfate to Staphylococcus aureus.
A;Reference number: A43848; MUID:92176005; PMID:1541563
A;Accession: A43848
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-9 <LIA>
A;Note: sequence extracted from NCBI backbone (NCBIP:85442)

Query Match 67.7%; Score 21; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXW 4
              |  |
Db          2 WTGW 5
```

RESULT 2
F49033
T-cell receptor gamma chain V-D-J region - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 19-Dec-1993 #sequence_revision 17-Mar-2000 #text_change 17-Mar-2000
C;Accession: F49033
R;Morita, C.T.; Verma, S.; Aparicio, P.; Martinez, C.; Spits, H.; Brenner, M.B.
Eur. J. Immunol. 21, 2999-3007, 1991
A;Title: Functionally distinct subsets of human gamma/delta T cells.
A;Reference number: A49033; MUID:92083926; PMID:1684157
A;Accession: F49033
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-10 <MOR>
A;Cross-references: GB:S72605; NID:g240700; PIDN:AAB20632.1; PID:g240701
A;Note: sequence extracted from NCBI backbone (NCBIN:72605, NCBIP:72606)
C;Keywords: T-cell receptor

Query Match 64.5%; Score 20; DB 2; Length 10;
Best Local Similarity 50.0%; Pred. No. 5.7e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXW 4
              |  |
Db          4 WERW 7
```

RESULT 3
PH1324
Ig heavy chain DJ region (clone C510-100) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: PH1324
R;Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.
J. Exp. Med. 176, 1577-1581, 1992
A;Title: Predominance of fetal type DJH joining in young children with B precursor lymph
A;Reference number: PH1302; MUID:93094761; PMID:1460419
A;Accession: PH1324
A;Molecule type: DNA
A;Residues: 1-12 <WAS>
C;Keywords: heterotetramer; immunoglobulin

Query Match 64.5%; Score 20; DB 2; Length 12;
Best Local Similarity 50.0%; Pred. No. 6.6e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXW 4
| |
Db 5 WYYW 8

RESULT 4
PH1308
Ig heavy chain DJ region (clone C731-94) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: PH1308
R;Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.
J. Exp. Med. 176, 1577-1581, 1992
A;Title: Predominance of fetal type DJH joining in young children with B precursor lymph
A;Reference number: PH1302; MUID:93094761; PMID:1460419
A;Accession: PH1308
A;Molecule type: DNA
A;Residues: 1-12 <WAS>
C;Keywords: heterotetramer; immunoglobulin

Query Match 64.5%; Score 20; DB 2; Length 12;
Best Local Similarity 50.0%; Pred. No. 6.6e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXW 4
| |
Db 7 WGQW 10

RESULT 5
S61798
T-cell-specific transcription factor 1 splice form G - human (fragment)
N;Alternate names: transcription factor TCF-1G
C;Species: Homo sapiens (man)
C;Date: 19-Mar-1997 #sequence_revision 18-Jul-1997 #text_change 24-Jul-1998
C;Accession: S61798; S61880
R;Mayer, K.; Wolff, E.; Clevers, H.; Ballhausen, W.G.
Biochim. Biophys. Acta 1263, 169-172, 1995
A;Title: The human high mobility group (HMG)-box transcription factor TCF-1: novel isofo
A;Reference number: S61796; MUID:95367594; PMID:7640309
A;Accession: S61798
A;Molecule type: mRNA
A;Residues: 1-13 <MAY>
A;Cross-references: EMBL:Z47364
A;Note: DNA was also sequenced
C;Keywords: alternative splicing; DNA binding; transcription factor

Query Match 64.5%; Score 20; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 7e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXW 4
| |
Db 6 WDGW 9

RESULT 6
PH1322
Ig heavy chain DJ region (clone C344-99) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: PH1322
R;Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.
J. Exp. Med. 176, 1577-1581, 1992
A;Title: Predominance of fetal type DJH joining in young children with B precursor lymp
A;Reference number: PH1302; MUID:93094761; PMID:1460419
A;Accession: PH1322
A;Molecule type: DNA
A;Residues: 1-14 <WAS>
C;Keywords: heterotetramer; immunoglobulin

Query Match 64.5%; Score 20; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 7.4e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXW 4
| |
Db 6 WDYW 9

RESULT 7
S23372
T-cell receptor alpha chain J region - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 22-Nov-1993 #sequence_revision 26-May-1995 #text_change 17-Mar-1999
C;Accession: S23372
R;Pluschke, G.; Ricken, G.; Taube, H.; Kroninger, S.; Melchers, I.; Peter, H.H.; Eichma
Eur. J. Immunol. 21, 2749-2754, 1991
A;Title: Biased T cell receptor V(alpha) region repertoire in the synovial fluid of rhe
A;Reference number: S23364; MUID:92037820; PMID:1657615
A;Accession: S23372
A;Status: preliminary; translation not shown
A;Molecule type: mRNA
A;Residues: 1-13 <PLU>
A;Cross-references: EMBL:X58167
C;Keywords: T-cell receptor

Query Match 54.8%; Score 17; DB 2; Length 13;
Best Local Similarity 66.7%; Pred. No. 2.2e+03;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4 WXF 6
| |
Db 11 WTF 13

RESULT 8
B25448
Ig kappa-1 chain, 69 allotype, J-K1.1 segment - rabbit (fragment)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change 05-Nov-1999
C;Accession: B25448
R;Akimenko, M.A.; Mariame, B.; Rougeon, F.
Proc. Natl. Acad. Sci. U.S.A. 83, 5180-5183, 1986
A;Title: Evolution of the immunoglobulin kappa light chain locus in the rabbit: eviden
A;Reference number: A94110; MUID:86259753; PMID:3088570
A;Accession: B25448
A;Molecule type: DNA
A;Residues: 1-13 <AKI>
A;Cross-references: GB:M14067; GB:M14062; GB:M14063; GB:M14064; GB:M14065; GB:M14066; I
C;Keywords: heterotetramer; immunoglobulin

Query Match 54.8%; Score 17; DB 2; Length 13;
Best Local Similarity 66.7%; Pred. No. 2.2e+03;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4 WXF 6

```
              | |
Db          1 WAF 3


RESULT 9
B26406
Ig kappa chain J region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 16-Aug-1996
C;Accession: B26406
R;Sanz, I.; Capra, J.D.
Proc. Natl. Acad. Sci. U.S.A. 84, 1085-1089, 1987
A;Title: V-K and J-K gene segments of A/J Ars-A antibodies: somatic recombination genera
A;Reference number: A26406; MUID:87147197; PMID:3103124
A;Accession: B26406
A;Molecule type: DNA
A;Residues: 1-13 <SAN>
A;Cross-references: GB:M15519
C;Keywords: heterotetramer; immunoglobulin

  Query Match             54.8%;  Score 17;  DB 2;  Length 13;
  Best Local Similarity   66.7%;  Pred. No. 2.2e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          1 WTF 3


RESULT 10
A47630
Ig kappa chain J region J1 - southeastern Australian rat
C;Species: Rattus sordidus villosissimus (southeastern Australian rat)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 05-Nov-1999
C;Accession: A47630
R;Gutman, G.A.; Besta, R.M.; Frank, M.B.; Baverstock, P.R.
Immunogenetics 26, 14-20, 1987
A;Title: Duplication of J-kappa genes within genus Rattus.
A;Reference number: A47630; MUID:87278355; PMID:3111993
A;Accession: A47630
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: DNA
A;Residues: 1-13 <GUT>
A;Cross-references: GB:M17319; NID:g204788; PIDN:AAA41397.1; PID:g204789
C;Keywords: heterotetramer; immunoglobulin

  Query Match             54.8%;  Score 17;  DB 2;  Length 13;
  Best Local Similarity   66.7%;  Pred. No. 2.2e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          1 WTF 3


RESULT 11
T13818
cytochrome oxidase subunit I - Atlantic hagfish mitochondrion (fragment)
C;Species: mitochondrion Myxine glutinosa (Atlantic hagfish)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 21-Jul-2000
C;Accession: T13818
R;Delarbre, C.; Barriel, V.; Tillier, S.; Janvier, P.; Gachelin, G.
Mol. Biol. Evol. 14, 807-813, 1997
A;Title: The main features of the craniate mitochondrial DNA between the ND1 and the COI
A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Accession: T13818
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-8 <DEL>
A;Cross-references: EMBL:Y09527; NID:g2340019; PIDN:CAA70718.1; PID:g2340022
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion

  Query Match             51.6%;  Score 16;  DB 2;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 2.8e+05;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          6 WFF 8


RESULT 12
T17054
cytochrome-c oxidase (EC 1.9.3.1) chain I - Basiliscus plumifrons mitochondrion (fragm
C;Species: mitochondrion Basiliscus plumifrons
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 22-Oct-1999
C;Accession: T17054
R;Macey, J.R.; Larson, A.; Ananjeva, N.B.; Papenfuss, T.J.
J. Mol. Evol. 44, 660-674, 1997
A;Title: Evolutionary shifts in three major structural features of the mitochondrial g
A;Reference number: Z18674; MUID:97315309; PMID:9169559
A;Accession: T17054
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-10 <MAC>
A;Cross-references: EMBL:U82680; NID:g3603104; PID:g3603107; PIDN:AAC62269.1
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion; oxidoreductase

  Query Match             51.6%;  Score 16;  DB 2;  Length 10;
  Best Local Similarity   66.7%;  Pred. No. 2.6e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          6 WLF 8


RESULT 13
T13976
cytochrome-c oxidase (EC 1.9.3.1) chain I - Cnemidophorus tigris mitochondrion (fragme
C;Species: mitochondrion Cnemidophorus tigris
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 11-May-2000
C;Accession: T13976
R;Macey, J.R.; Larson, A.; Ananjeva, N.B.; Fang, Z.; Papenfuss, T.J.
Mol. Biol. Evol. 14, 91-104, 1997
A;Title: Two novel gene orders and the role of light-strand replication in rearrangeme
A;Reference number: Z17789; MUID:97153826; PMID:9000757
A;Accession: T13976
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-10 <MAC>
A;Cross-references: EMBL:U71332; NID:g1753236; PID:g1753239; PIDN:AAB48274.1
C;Genetics:
A;Genome: mitochondrion
A;Note: CO1
C;Keywords: mitochondrion; oxidoreductase

  Query Match             51.6%;  Score 16;  DB 2;  Length 10;
  Best Local Similarity   66.7%;  Pred. No. 2.6e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WXF 6
              | |
Db          6 WFF 8


RESULT 14
T17057
cytochrome-c oxidase (EC 1.9.3.1) chain I - Crotaphytus collaris mitochondrion (fragme
C;Species: mitochondrion Crotaphytus collaris
```

C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 22-Oct-1999
C;Accession: T17057
R;Macey, J.R.; Larson, A.; Ananjeva, N.B.; Papenfuss, T.J.
J. Mol. Evol. 44, 660-674, 1997
A;Title: Evolutionary shifts in three major structural features of the mitochondrial gen
A;Reference number: Z18674; MUID:97315309; PMID:9169559
A;Accession: T17057
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-10 <MAC>
A;Cross-references: EMBL:U82681; NID:g3603108; PID:g3603111; PIDN:AAC62272.1
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion; oxidoreductase

Query Match 51.6%; Score 16; DB 2; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.6e+03;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4 WXF 6
| |
Db 6 WFF 8

RESULT 15
T12303
cytochrome-c oxidase (EC 1.9.3.1) chain I - Dipsosaurus dorsalis mitochondrion (fragment
C;Species: mitochondrion Dipsosaurus dorsalis
C;Date: 23-Jul-1999 #sequence_revision 23-Jul-1999 #text_change 22-Oct-1999
C;Accession: T12303
R;Schulte, J.A.; Macey, J.R.; Larson, A.; Papenfuss, T.J.
Mol. Phylogenet. Evol. 10, 367-376, 1998
A;Title: Molecular tests of phylogenetic taxonomies: A general procedure and example usi
A;Reference number: Z17488; MUID:99162288; PMID:10051389
A;Accession: T12303
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-10 <SCH>
A;Cross-references: EMBL:AF049857; NID:g4105726; PID:g4105729; PIDN:AAD02514.1
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion; oxidoreductase

Query Match 51.6%; Score 16; DB 2; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.6e+03;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4 WXF 6
| |
Db 6 WFF 8

Search completed: December 3, 2003, 11:54:08
Job time : 11 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 12, 2003, 10:26:30 ; Search time 30.3 Seconds
(without alignments)
31.431 Million cell updates/sec

Title: US-09-912-414-9
Perfect score: 31
Sequence: 1 WXXWXF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 350435

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	28	90.3	15	20	AAY30351	Epitope derived fr
2	28	90.3	15	23	AAE19239	Streptococcus pneu
3	27	87.1	9	23	AAE26751	Fibrin binding loo
4	27	87.1	15	23	AAE26733	Fibrin binding pep
5	26	83.9	6	21	AAB01505	Peptide which bind
6	26	83.9	6	21	AAB01506	Peptide which bind
7	26	83.9	6	21	AAB01508	Peptide which bind
8	26	83.9	6	24	ABR45313	Staphylococcus aur
9	26	83.9	6	24	ABR45314	Staphylococcus aur
10	26	83.9	6	24	ABR45369	Staphylococcus aur
11	26	83.9	6	24	ABR45370	Staphylococcus aur
12	26	83.9	6	24	ABR45425	Staphylococcus aur
13	26	83.9	6	24	ABR45426	Staphylococcus aur
14	26	83.9	6	24	ABR45481	Staphylococcus aur
15	26	83.9	6	24	ABR45482	Staphylococcus aur
16	26	83.9	6	24	ABR45593	Staphylococcus aur
17	26	83.9	6	24	ABR45594	Staphylococcus aur
18	26	83.9	9	23	AAE26775	Fibrin binding pep
19	26	83.9	15	21	AAY65508	Oestrogen receptor
20	26	83.9	15	23	ABB99042	Serine/threonine p
21	26	83.9	15	23	AAE26759	Fibrin binding pep
22	26	83.9	15	23	AAU86245	Oestrogen receptor
23	25	80.6	6	15	AAR57391	Peptide for treati
24	25	80.6	6	21	AAB01492	Peptide which bind
25	25	80.6	6	21	AAB01497	Peptide which bind
26	25	80.6	6	21	AAB01499	Peptide which bind
27	25	80.6	6	24	ABR44865	Staphylococcus aur
28	25	80.6	6	24	ABR44866	Staphylococcus aur
29	25	80.6	6	24	ABR45311	Staphylococcus aur
30	25	80.6	6	24	ABR45312	Staphylococcus aur
31	25	80.6	6	24	ABR45367	Staphylococcus aur
32	25	80.6	6	24	ABR45368	Staphylococcus aur
33	25	80.6	6	24	ABR45423	Staphylococcus aur
34	25	80.6	6	24	ABR45424	Staphylococcus aur
35	25	80.6	6	24	ABR45479	Staphylococcus aur
36	25	80.6	6	24	ABR45480	Staphylococcus aur
37	25	80.6	6	24	ABR45537	Staphylococcus aur
38	25	80.6	6	24	ABR45538	Staphylococcus aur
39	25	80.6	6	24	ABR45591	Staphylococcus aur
40	25	80.6	6	24	ABR45592	Staphylococcus aur
41	25	80.6	7	22	AAM45777	H11 binding site c
42	25	80.6	9	21	AAB01498	Peptide which bind
43	25	80.6	11	21	AAB20714	Polymeric immunogl
44	25	80.6	13	18	AAW38112	Dystrophin WW doma
45	25	80.6	14	22	AAE07760	Human HLA-DP restr

ALIGNMENTS

RESULT 1
AAY30351
ID AAY30351 standard; Peptide; 15 AA.
XX
AC AAY30351;
XX
DT 09-NOV-1999 (first entry)
XX
DE Epitope derived from pneumoccocal surface adhesion A protein.
XX
KW Pneumoccocal surface adhesion A protein; PsaA; monoclonal antibody;
KW vaccine; Streptococcus pneumoniae infection.
XX
OS Streptococcus pneumoniae.
XX
PN WO9945121-A1.
XX
PD 10-SEP-1999.
XX
PF 26-FEB-1999; 99WO-US04326.
XX
PR 02-MAR-1998; 98US-0076565.
XX
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Ades EW, Carlone GM, Sampson JS, Tharpe JA, Westerink MAJ;
PI Zeiler JL;
XX
DR WPI; 1999-540849/45.
XX
PT New peptides corresponding to Streptococcus pneumoniae PsaA, used
PT for treating or preventing Streptococcus pneumoniae infection in a

PT subject
XX
PS Claim 6; Page 43; 58pp; English.
XX
CC AAY30351-54 represent immunogenic peptides which are derived from
CC a pneumoccocal surface adhesion A protein (PsaA). The specification
CC describes monoclonal antibodies which bind epitopes of the PsaA protein
CC (e.g present sequence). The peptides can be used in vaccines to prevent
CC Streptococcus pneumoniae infections. The antibodies of the invention
CC can also be used to detect S. pneumoniae in a sample or individual.
XX
SQ Sequence 15 AA;

Query Match 90.3%; Score 28; DB 20; Length 15;
Best Local Similarity 50.0%; Pred. No. 1.1e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 7 WTAWAF 12

RESULT 2
AAE19239
ID AAE19239 standard; peptide; 15 AA.
XX
AC AAE19239;
XX
DT 21-MAY-2002 (first entry)
XX
DE Streptococcus pneumoniae PsaA immunogenic peptide #1.
XX
KW Multiple antigenic peptide; MAP; immunogenic; immunity; infection;
KW pneumococcal surface adhesin protein A; PsaA; antibacterial.
XX
OS Streptococcus pneumoniae.
XX
PN WO200204497-A2.
XX
PD 17-JAN-2002.
XX
PF 10-JUL-2001; 2001WO-US21626.
XX
PR 10-JUL-2000; 2000US-0613092.
XX
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Ades EW, Johnson SE, Jue DL, Sampson JS, Carlone GM;
XX
DR WPI; 2002-195762/25.
XX
PT New multiple antigenic peptide for immunizing against streptococcal
PT infections, binds to monoclonal antibody obtained in response to
PT immunizing an animal with pneumococcal surface adhesion protein A or
PT its fragment -
XX
PS Claim 2; Page 56; 86pp; English.
XX
CC The invention relates to multiple antigenic peptides (MAP) immunogenic
CC against Streptococcus pneumoniae. MAP binds to monoclonal antibody
CC obtained in response to immunising an animal with pneumococcal surface
CC adhesion protein A (PsaA) or its fragment. MAP is useful for conferring
CC protective immunity against S. pneumoniae infection in a subject. The
CC present sequence is Streptococcus pneumoniae PsaA immunogenic peptide.
XX
SQ Sequence 15 AA;

Query Match 90.3%; Score 28; DB 23; Length 15;
Best Local Similarity 50.0%; Pred. No. 1.1e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 7 WTAWAF 12

RESULT 3
AAE26751
ID AAE26751 standard; peptide; 9 AA.
XX
AC AAE26751;
XX
DT 13-DEC-2002 (first entry)
XX
DE Fibrin binding loop #3.
XX
KW Fibrin binding peptide; thrombosis; pulmonary embolism; atherosclerosis;
KW myocardial infarct; ischaemia; imaging; rheumatoid arthritis; vasotropic;
KW anaemia; hypoxia; tumour; diabetic retinopathy; autoimmune disorder;
KW inflammatory disorder; angiogenesis; stroke; cerebroprotective.
XX
OS Unidentified.
XX
PN WO200255544-A2.
XX
PD 18-JUL-2002.
XX
PF 21-DEC-2001; 2001WO-US49534.
XX
PR 23-DEC-2000; 2000US-0747403.
XX
PA (DYAX-) DYAX CORP.
XX
PI Wescott CR, Beltzer JP, Sato AK;
XX
DR WPI; 2002-666875/71.
XX
PT Novel synthetic fibrin-binding moiety, useful for detecting, imaging or
PT localizing fibrin-containing clots by magnetic resonance imaging,
PT radioimaging and for treating diseases involving thrombus formation
PT e.g. stroke -
XX
PS Claim 4; Page 55; 89pp; English.
XX
CC The invention relates to a synthetic fibrin binding group having affinity
CC for fibrin. The invention is useful for detecting fibrin in a mammalian
CC subject which involves (a) detectably labelling the binding group; (b)
CC administering to the subject the labelled polypeptide, and (c) detecting
CC the labelled polypeptide in the subject. The invention is useful for
CC treating a disease involving thrombus formation eg. deep-vein thrombosis,
CC pulmonary embolism, cardiogenic thrombosis, atherosclerosis, myocardial
CC infarct, reperfusion ischaemia or stroke. The binding moieties are useful
CC for detection, imaging and localisation of fibrin-containing clots by
CC magnetic resonance imaging, radioimaging and other imaging methods and
CC are also useful in the diagnosis and treatment of coronary conditions
CC where fibrin plays a role. The fibrin binding moieties are useful for
CC detecting and diagnosing numerous pathophysiologies in which fibrin plays
CC a role eg. peritoneal adhesions which often occur after surgery or
CC inflammatory and neoplastic processes and are comprised of a fibrin
CC network, fibroblasts, macrophages and new blood vessels; rheumatoid
CC arthritis, lupus or septic arthritis which often have bits of fibrin
CC containing tissues called rice bodies in the synovial fluid of their
CC joints; thrombocytopenic purpura, a type of anaemia in which deposits in
CC arterioles causes turbulent blood flow resulting in stress and
CC destruction of red blood cells. The fibrin specific agents can also be
CC used to detect hypoxia or ischaemia of heart, kidney, liver, lung, brain
CC or other organs, as well as the detection of tumours, diabetic
CC retinopathy, early or high-risk atherosclerosis and other autoimmune and
CC inflammatory disorders. Fibrin specific agents also could provide both
CC direct or surrogate markers of disease models in which hypoxia and
CC angiogenesis are expected to play a role. The invention is also useful
CC for screening molecular libraries. The present sequence is a fibrin
CC binding loop.
XX
SQ Sequence 9 AA;

Query Match 87.1%; Score 27; DB 23; Length 9;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              |  | |
Db          3 WESWTF 8
```

RESULT 4
AAE26733
ID AAE26733 standard; peptide; 15 AA.
XX
AC AAE26733;
XX
DT 13-DEC-2002 (first entry)
XX
DE Fibrin binding peptide #4.
XX
KW Fibrin binding peptide; thrombosis; pulmonary embolism; atherosclerosis;
KW myocardial infarct; ischaemia; imaging; rheumatoid arthritis; vasotropic;
KW anaemia; hypoxia; tumour; diabetic retinopathy; autoimmune disorder;
KW inflammatory disorder; angiogenesis; stroke; cerebroprotective.
XX
OS Unidentified.
XX
PN WO200255544-A2.
XX
PD 18-JUL-2002.
XX
PF 21-DEC-2001; 2001WO-US49534.
XX
PR 23-DEC-2000; 2000US-0747403.
XX
PA (DYAX-) DYAX CORP.
XX
PI Wescott CR, Beltzer JP, Sato AK;
XX
DR WPI; 2002-666875/71.
XX
PT Novel synthetic fibrin-binding moiety, useful for detecting, imaging or
PT localizing fibrin-containing clots by magnetic resonance imaging,
PT radioimaging and for treating diseases involving thrombus formation
PT e.g. stroke -
XX
PS Claim 10; Page 57; 89pp; English.
XX
CC The invention relates to a synthetic fibrin binding group having affinity
CC for fibrin. The invention is useful for detecting fibrin in a mammalian
CC subject which involves (a) detectably labelling the binding group; (b)
CC administering to the subject the labelled polypeptide, and (c) detecting
CC the labelled polypeptide in the subject. The invention is useful for
CC treating a disease involving thrombus formation eg. deep-vein thrombosis,
CC pulmonary embolism, cardiogenic thrombosis, atherosclerosis, myocardial
CC infarct, reperfusion ischaemia or stroke. The binding moieties are useful
CC for detection, imaging and localisation of fibrin-containing clots by
CC magnetic resonance imaging, radioimaging and other imaging methods and
CC are also useful in the diagnosis and treatment of coronary conditions
CC where fibrin plays a role. The fibrin binding moieties are useful for
CC detecting and diagnosing numerous pathophysiologies in which fibrin plays
CC a role eg. peritoneal adhesions which often occur after surgery or
CC inflammatory and neoplastic processes and are comprised of a fibrin
CC network, fibroblasts, macrophages and new blood vessels; rheumatoid
CC arthritis, lupus or septic arthritis which often have bits of fibrin
CC containing tissues called rice bodies in the synovial fluid of their
CC joints; thrombocytopenic purpura, a type of anaemia in which deposits in
CC arterioles causes turbulent blood flow resulting in stress and
CC destruction of red blood cells. The fibrin specific agents can also be
CC used to detect hypoxia or ischaemia of heart, kidney, liver, lung, brain
CC or other organs, as well as the detection of tumours, diabetic
CC retinopathy, early or high-risk atherosclerosis and other autoimmune and
CC inflammatory disorders. Fibrin specific agents also could provide both
CC direct or surrogate markers of disease models in which hypoxia and
CC angiogenesis are expected to play a role. The invention is also useful
CC for screening molecular libraries. The present sequence is a fibrin
CC binding peptide.
XX
SQ Sequence 15 AA;

Query Match 87.1%; Score 27; DB 23; Length 15;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              |  | |
Db          6 WESWTF 11
```

RESULT 5
AAB01505
ID AAB01505 standard; peptide; 6 AA.
XX
AC AAB01505;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 21; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              |  | |
Db          1 WARWHF 6
```

RESULT 6
AAB01506
ID AAB01506 standard; peptide; 6 AA.

XX
AC AAB01506;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 21; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WVAWHF 6

RESULT 7
AAB01508
ID AAB01508 standard; peptide; 6 AA.
XX
AC AAB01508;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 21; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WVRWAF 6

RESULT 8
ABR45313
ID ABR45313 standard; Peptide; 6 AA.
XX
AC ABR45313;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #503.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and

PT kidney diseases -
XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              |  | |
Db          1 WSFWFF 6
```

RESULT 9
ABR45314
ID ABR45314 standard; Peptide; 6 AA.
XX
AC ABR45314;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #504.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              |  | |
Db          1 WTFWFF 6
```

RESULT 10
ABR45369
ID ABR45369 standard; Peptide; 6 AA.
XX
AC ABR45369;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #559.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

```
  Query Match             83.9%;  Score 26;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | |
Db          1 WSFWIF 6
```

```
RESULT 11
ABR45370
ID   ABR45370 standard; Peptide; 6 AA.
XX
AC   ABR45370;
XX
DT   10-JUN-2003  (first entry)
XX
DE   Staphylococcus aureus CHIPS-related peptide #560.
XX
KW   CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW   formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW   inflammation; cardiovascular disease; central nervous system disease;
KW   gastrointestinal disease; skin disease; genitourinary disease;
KW   joint disease; respiratory disease; HIV infection; antiinflammatory;
KW   cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW   gynecological; immunosuppressive; anti-HIV.
XX
OS   Staphylococcus aureus.
OS   Synthetic.
XX
PN   WO2003006048-A1.
XX
PD   23-JAN-2003.
XX
PF   11-JUL-2001; 2001WO-EP08004.
XX
PR   11-JUL-2001; 2001WO-EP08004.
XX
PA   (JARI-) JARI PHARM BV.
XX
PI   Van Kessel CPM,  Gosselaar-de Haas CJC,  Kruijtzer JAW;
PI   Van Strijp JAG;
XX
DR   WPI; 2003-247783/25.
XX
PT   Combination of peptides derived from chemotaxis inhibiting protein from
PT   Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT   prophylaxis and treatment of inflammation, cardiovascular, skin and
PT   kidney diseases  -
XX
PS   Disclosure; Page 12; 89pp; English.
XX
CC   The present invention relates to peptides (ABR44811-ABR47162 and
CC   ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC   from Staphylococcus aureus. The peptide fragments are useful in the
CC   prophylaxis or treatment of diseases or disorders involving the
CC   C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC   neutrophils, monocytes and endothelial cells or involving acute or
CC   chronic inflammation reactions. The diseases or disorders include
CC   cardiovascular diseases, disease of the central nervous system,
CC   gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC   diseases, respiratory diseases and HIV infection.
XX
SQ   Sequence   6 AA;
```

```
  Query Match             83.9%;  Score 26;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | |
Db          1 WTFWIF 6
```

```
RESULT 12
ABR45425
ID   ABR45425 standard; Peptide; 6 AA.
XX
AC   ABR45425;
XX
DT   10-JUN-2003  (first entry)
XX
DE   Staphylococcus aureus CHIPS-related peptide #615.
XX
KW   CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW   formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW   inflammation; cardiovascular disease; central nervous system disease;
KW   gastrointestinal disease; skin disease; genitourinary disease;
KW   joint disease; respiratory disease; HIV infection; antiinflammatory;
KW   cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW   gynecological; immunosuppressive; anti-HIV.
XX
OS   Staphylococcus aureus.
OS   Synthetic.
XX
PN   WO2003006048-A1.
XX
PD   23-JAN-2003.
XX
PF   11-JUL-2001; 2001WO-EP08004.
XX
PR   11-JUL-2001; 2001WO-EP08004.
XX
PA   (JARI-) JARI PHARM BV.
XX
PI   Van Kessel CPM,  Gosselaar-de Haas CJC,  Kruijtzer JAW;
PI   Van Strijp JAG;
XX
DR   WPI; 2003-247783/25.
XX
PT   Combination of peptides derived from chemotaxis inhibiting protein from
PT   Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT   prophylaxis and treatment of inflammation, cardiovascular, skin and
PT   kidney diseases  -
XX
PS   Disclosure; Page 12; 89pp; English.
XX
CC   The present invention relates to peptides (ABR44811-ABR47162 and
CC   ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC   from Staphylococcus aureus. The peptide fragments are useful in the
CC   prophylaxis or treatment of diseases or disorders involving the
CC   C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC   neutrophils, monocytes and endothelial cells or involving acute or
CC   chronic inflammation reactions. The diseases or disorders include
CC   cardiovascular diseases, disease of the central nervous system,
CC   gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC   diseases, respiratory diseases and HIV infection.
XX
SQ   Sequence   6 AA;
```

```
  Query Match             83.9%;  Score 26;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | |
Db          1 WSFWLF 6
```

```
RESULT 13
ABR45426
ID   ABR45426 standard; Peptide; 6 AA.
XX
AC   ABR45426;
XX
```

DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #616.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WTFWLF 6

RESULT 14
ABR45481
ID ABR45481 standard; Peptide; 6 AA.
XX
AC ABR45481;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #671.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WSFWVF 6

RESULT 15
ABR45482
ID ABR45482 standard; Peptide; 6 AA.
XX
AC ABR45482;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #672.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.

XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WTFWVF 6

RESULT 16
ABR45593
ID ABR45593 standard; Peptide; 6 AA.
XX
AC ABR45593;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #783.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WSFWYF 6

RESULT 17
ABR45594
ID ABR45594 standard; Peptide; 6 AA.
XX
AC ABR45594;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #784.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in

PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 83.9%; Score 26; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WTFWYF 6

RESULT 18
AAE26775
ID AAE26775 standard; peptide; 9 AA.
XX
AC AAE26775;
XX
DT 13-DEC-2002 (first entry)
XX
DE Fibrin binding peptide #28.
XX
KW Fibrin binding peptide; thrombosis; pulmonary embolism; atherosclerosis;
KW myocardial infarct; ischaemia; imaging; rheumatoid arthritis; vasotropic;
KW anaemia; hypoxia; tumour; diabetic retinopathy; autoimmune disorder;
KW inflammatory disorder; angiogenesis; stroke; cerebroprotective.
XX
OS Unidentified.
XX
PN WO200255544-A2.
XX
PD 18-JUL-2002.
XX
PF 21-DEC-2001; 2001WO-US49534.
XX
PR 23-DEC-2000; 2000US-0747403.
XX
PA (DYAX-) DYAX CORP.
XX
PI Wescott CR, Beltzer JP, Sato AK;
XX
DR WPI; 2002-666875/71.
XX
PT Novel synthetic fibrin-binding moiety, useful for detecting, imaging or
PT localizing fibrin-containing clots by magnetic resonance imaging,
PT radioimaging and for treating diseases involving thrombus formation
PT e.g. stroke -
XX
PS Claim 4; Page 55; 89pp; English.
XX
CC The invention relates to a synthetic fibrin binding group having affinity
CC for fibrin. The invention is useful for detecting fibrin in a mammalian
CC subject which involves (a) detectably labelling the binding group; (b)
CC administering to the subject the labelled polypeptide, and (c) detecting
CC the labelled polypeptide in the subject. The invention is useful for
CC treating a disease involving thrombus formation eg. deep-vein thrombosis,
CC pulmonary embolism, cardiogenic thrombosis, atherosclerosis, myocardial
CC infarct, reperfusion ischaemia or stroke. The binding moieties are useful
CC for detection, imaging and localisation of fibrin-containing clots by
CC magnetic resonance imaging, radioimaging and other imaging methods and
CC are also useful in the diagnosis and treatment of coronary conditions
CC where fibrin plays a role. The fibrin binding moieties are useful for
CC detecting and diagnosing numerous pathophysiologies in which fibrin plays
CC a role eg. peritoneal adhesions which often occur after surgery or
CC inflammatory and neoplastic processes and are comprised of a fibrin
CC network, fibroblasts, macrophages and new blood vessels; rheumatoid
CC arthritis, lupus or septic arthritis which often have bits of fibrin
CC containing tissues called rice bodies in the synovial fluid of their
CC joints; thrombocytopenic purpura, a type of anaemia in which deposits in
CC arterioles causes turbulent blood flow resulting in stress and
CC destruction of red blood cells. The fibrin specific agents can also be
CC used to detect hypoxia or ischaemia of heart, kidney, liver, lung, brain
CC or other organs, as well as the detection of tumours, diabetic
CC retinopathy, early or high-risk atherosclerosis and other autoimmune and
CC inflammatory disorders. Fibrin specific agents also could provide both
CC direct or surrogate markers of disease models in which hypoxia and
CC angiogenesis are expected to play a role. The invention is also useful
CC for screening molecular libraries. The present sequence is a fibrin
CC binding peptide.
XX
SQ Sequence 9 AA;

Query Match 83.9%; Score 26; DB 23; Length 9;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 3 WGSWKF 8

RESULT 19
AAY65508
ID AAY65508 standard; Peptide; 15 AA.
XX
AC AAY65508;
XX
DT 01-FEB-2000 (first entry)
XX
DE Oestrogen receptor alpha binding peptide 5PT.
XX
KW Oestrogen receptor; estrogen; estradiol; oestrogen response element;
KW ERE; binding; biological activity; fingerprint; molecular braille;
KW cellular braille; modulation; tamoxifen; breast cancer; ovarian cancer;
KW menopause; osteoporosis; selective oestrogen receptor modulator;
KW identification; characterisation; classification.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9954728-A2.
XX
PD 28-OCT-1999.
XX
PF 26-MAR-1999; 99WO-US06664.
XX
PR 23-APR-1998; 98US-0082756.
PR 09-SEP-1998; 98US-0099656.
PR 08-JAN-1999; 99US-0115345.
XX
PA (NOVA-) NOVALON PHARM CORP.
XX
PI Paige LA, Hamilton PT, Fowlkes DM, Buehrer B, Barnett T;
PI McDonnell DP, Christensen DJ;
XX
DR WPI; 2000-013281/01.
XX
PT Methods for identifying new receptor modulators, especially estrogen
PT modulators to treat tamoxifen refractory breast cancer -
XX
PS Example 2.1; Page 159; 219pp; English.

XX
CC The present invention describes a method for predicting the biological
CC activity of new receptor modulating compounds (I) using novel oligomeric
CC peptides (biokeys) which have differential abilities to bind to 2
CC different receptor conformations. The method is used to identify new
CC drugs that are physiological or pharmacological agonists/antagonists and
CC that target various receptors, which are involved in certain disease
CC conditions. The system may be used as a primary screening tool to
CC identify hits, to classify lead compounds from a drug screen to,
CC characterise selective oestrogen receptor modulators (SERMs) in terms of
CC agonist and antagonist function and to predict possible clinical effects
CC of SERMs such as tissue and receptor specificity. The method can also be
CC applied to the fractionation of mixtures of SERMs to determine which
CC components are producing agonistic and antagonistic activity. The method
CC may be used with other receptors (e.g. progesterone, androgen,
CC glucocorticoid, thyroid, vitamin D, beta-adrenergic, dopamine and
CC epidermal growth factor, to identify, characterise and classify
CC modulators of receptor activity. Peptides comprising a LXXLL motif may
CC be used to modulate the oestrogen receptor in treating e.g. breast and
CC ovarian cancer and ameliorating the effects of menopause, including
CC osteoporosis. AAY65439 to AAY65652 represent oestrogen receptor,
CC estradiol receptor and oestrogen response element binding peptides given
CC in the exemplification of the present invention. AAZ35740 to AAZ35745
CC represent oligonucleotides used in the exemplification of the present
CC invention.
XX
SQ Sequence 15 AA;

Query Match 83.9%; Score 26; DB 21; Length 15;
Best Local Similarity 50.0%; Pred. No. 2.4e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 8 WYDWTF 13

RESULT 20
ABB99042
ID ABB99042 standard; Peptide; 15 AA.
XX
AC ABB99042;
XX
DT 24-JAN-2003 (first entry)
XX
DE Serine/threonine protein kinase 9.13 N-terminal peptide sequence.
XX
KW Serine/threonine protein kinase 9.13; enzyme; tumour;
KW embryonic development malformation; protein metabolic disorder.
XX
OS Unidentified.
XX
PN CN1352273-A.
XX
PD 05-JUN-2002.
XX
PF 02-NOV-2000; 2000CN-0127173.
XX
PR 02-NOV-2000; 2000CN-0127173.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-637138/69.
XX
PT New serine/threonine protein kinase 9.13 polypeptide for treating
PT embryonic development malformation, various tumours and protein
PT metabolic disorder -
XX
PS Example 5; Page 21 (disclosure); 35pp; Chinese.
XX
CC The present invention discloses a serine/threonine protein kinase 9.13,
CC the polynucleotides encoding the polypeptide, and a DNA recombination
CC process to produce the polypeptide. The present invention also discloses
CC applying the polypeptide in treating various diseases, such as embryonic
CC development malformation, various tumours and protein metabolic disorder.
CC The present invention also discloses the antagonist resisting the
CC polypeptide and its treatment effect. The current sequence represents the
CC serine/threonine protein kinase 9.13 N-terminal peptide sequence.
XX
SQ Sequence 15 AA;

Query Match 83.9%; Score 26; DB 23; Length 15;
Best Local Similarity 50.0%; Pred. No. 2.4e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 6 WLFWSF 11

RESULT 21
AAE26759
ID AAE26759 standard; peptide; 15 AA.
XX
AC AAE26759;
XX
DT 13-DEC-2002 (first entry)
XX
DE Fibrin binding peptide #12.
XX
KW Fibrin binding peptide; thrombosis; pulmonary embolism; atherosclerosis;
KW myocardial infarct; ischaemia; imaging; rheumatoid arthritis; vasotropic;
KW anaemia; hypoxia; tumour; diabetic retinopathy; autoimmune disorder;
KW inflammatory disorder; angiogenesis; stroke; cerebroprotective.
XX
OS Unidentified.
XX
PN WO200255544-A2.
XX
PD 18-JUL-2002.
XX
PF 21-DEC-2001; 2001WO-US49534.
XX
PR 23-DEC-2000; 2000US-0747403.
XX
PA (DYAX-) DYAX CORP.
XX
PI Wescott CR, Beltzer JP, Sato AK;
XX
DR WPI; 2002-666875/71.
XX
PT Novel synthetic fibrin-binding moiety, useful for detecting, imaging or
PT localizing fibrin-containing clots by magnetic resonance imaging,
PT radioimaging and for treating diseases involving thrombus formation
PT e.g. stroke -
XX
PS Claim 10; Page 58; 89pp; English.
XX
CC The invention relates to a synthetic fibrin binding group having affinity
CC for fibrin. The invention is useful for detecting fibrin in a mammalian
CC subject which involves (a) detectably labelling the binding group; (b)
CC administering to the subject the labelled polypeptide, and (c) detecting
CC the labelled polypeptide in the subject. The invention is useful for
CC treating a disease involving thrombus formation eg. deep-vein thrombosis,
CC pulmonary embolism, cardiogenic thrombosis, atherosclerosis, myocardial
CC infarct, reperfusion ischaemia or stroke. The binding moieties are useful
CC for detection, imaging and localisation of fibrin-containing clots by
CC magnetic resonance imaging, radioimaging and other imaging methods and
CC are also useful in the diagnosis and treatment of coronary conditions
CC where fibrin plays a role. The fibrin binding moieties are useful for
CC detecting and diagnosing numerous pathophysiologies in which fibrin plays
CC a role eg. peritoneal adhesions which often occur after surgery or
CC inflammatory and neoplastic processes and are comprised of a fibrin
CC network, fibroblasts, macrophages and new blood vessels; rheumatoid

CC arthritis, lupus or septic arthritis which often have bits of fibrin
CC containing tissues called rice bodies in the synovial fluid of their
CC joints; thrombocytopenic purpura, a type of anaemia in which deposits in
CC arterioles causes turbulent blood flow resulting in stress and
CC destruction of red blood cells. The fibrin specific agents can also be
CC used to detect hypoxia or ischaemia of heart, kidney, liver, lung, brain
CC or other organs, as well as the detection of tumours, diabetic
CC retinopathy, early or high-risk atherosclerosis and other autoimmune and
CC inflammatory disorders. Fibrin specific agents also could provide both
CC direct or surrogate markers of disease models in which hypoxia and
CC angiogenesis are expected to play a role. The invention is also useful
CC for screening molecular libraries. The present sequence is a fibrin
CC binding peptide.
XX
SQ Sequence 15 AA;

Query Match 83.9%; Score 26; DB 23; Length 15;
Best Local Similarity 50.0%; Pred. No. 2.4e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 6 WGSWKF 11

RESULT 22
AAU86245
ID AAU86245 standard; Peptide; 15 AA.
XX
AC AAU86245;
XX
DT 21-MAY-2002 (first entry)
XX
DE Oestrogen receptor alpha binding peptide 5PT.
XX
KW Oestrogen receptor; breast cancer; combinatorial peptide library;
KW receptor modulating compound.
XX
OS Synthetic.
XX
PN WO200204956-A2.
XX
PD 17-JAN-2002.
XX
PF 11-JUL-2001; 2001WO-US21867.
XX
PR 12-JUL-2000; 2000US-0614865.
PR 21-MAY-2001; 2001US-0860688.
XX
PA (KARO-) KARO BIO USA INC.
XX
PI Fowlkes DM, Barnett TR, Buehrer B;
XX
DR WPI; 2002-154969/20.
XX
PT Identifying receptor-binding peptides comprises screening combinatorial
PT peptide library presented in form of cells each of which coexpress one
PT peptide member and receptor with signal producing system for reporting
PT binding -
XX
PS Disclosure; Page 142; 175pp; English.
XX
CC The invention relates to identifying a binding peptide which binds a
CC receptor and which is a member of a combinatorial library of peptides,
CC comprising screening a combinatorial peptide library presented in the
CC form of cells which coexpress the receptor or its ligand-binding receptor
CC moiety and one member of the library, together with a signal producing
CC system for reporting binding of the peptide to the receptor. Also
CC included is a method for predicting the receptor-modulating activity of a
CC compound which modulates the biological activity of a receptor
CC comprising (a) identifying peptides which bind the receptor by the
CC method above, (b) using a number of the peptides to predict the receptor-
CC modulating activity of a compound by (i) providing a panel of
CC identified peptides, where the members differ in their ability to bind
CC to the receptor depending on reference conformations the receptor is
CC in, where the effect of a number of reference substances known to
CC modulate the biological activity of the receptor on the binding of each
CC member of the panel is known and is characterised as a reference
CC fingerprint for each reference substance, (ii) screening a test substance
CC of unknown activity relative to the receptor to determine its effect on
CC the binding of each member of the panel to the receptor, thereby
CC obtaining a test fingerprint for the test substance, (iii) comparing the
CC test fingerprint to the reference fingerprints and (iv) predicting the
CC biological activity of the test substance based on the assumption that
CC its biological activity will be similar to that of reference substances
CC with similar fingerprints. The method is useful for identifying a binding
CC peptide which binds a vertebrate, mammalian, preferably human receptor,
CC an intracellular, nuclear, oestrogen or androgen receptor. The identified
CC peptides which bind to the receptor are useful for predicting the
CC receptor-modulating activity of a compound (e.g. ant/agonists).
CC The receptor-binding library members are useful in the prediction of the
CC ability of small organic molecules, suitable for pharmaceutical use
CC (e.g. in the case of oestrogen receptors, for breast cancer treatment),
CC to interact with the receptor. The analyte-binding molecules can also be
CC used for in vivo imaging. The method has several advantages over whole
CC animal-based assay systems in that the same technology can be applied to
CC a variety of different receptors, the system can be used for high
CC throughput screening and compound characterisation, and gives very
CC distinct patterns for agonists and antagonists of receptor activity using
CC very much less protein. The present sequence is an oestrogen receptor
CC binding peptide from a combinatorial peptide library.
XX
SQ Sequence 15 AA;

Query Match 83.9%; Score 26; DB 23; Length 15;
Best Local Similarity 50.0%; Pred. No. 2.4e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 8 WYDWTF 13

RESULT 23
AAR57391
ID AAR57391 standard; Protein; 6 AA.
XX
AC AAR57391;
XX
DT 21-MAR-1995 (first entry)
XX
DE Peptide for treating diseases related to anti-DNA antibodies.
XX
KW Carrier; absorbing agent; treatment; anti-DNA antibody; immune compex.
XX
OS Synthetic.
XX
PN JP06192290-A.
XX
PD 12-JUL-1994.
XX
PF 18-JAN-1993; 93JP-0006098.
XX
PR 30-SEP-1992; 92JP-0261821.
XX
PA (KURS) KURARAY CO LTD.
XX
DR WPI; 1994-260510/32.
XX
PT A peptide and an adsorbing agent prepd. by immobilising it on a
PT carrier - useful for treatment of diseases related to anti-DNA
PT antibodies and immune complexes
XX
PS Disclosure; Page 11; 14pp; Japanese.
XX
CC The sequences given in AAR57386-413 are peptides which are all covered

CC by the claimed generic formula:
CC H-X-(A-B)n-Y-Z
CC A = Trp, Phe or a peptide fragment consisting of 2 residues;
CC B = Trp, Phe, Asn or Glu;
CC X and Y = a bond or Asp, Glu, Arg, Lys, His or a peptide fragment
CC consisting of 2-10 residues, provided that at least one of
CC X or Y are present;
CC Z = OH or NH2; and
CC n = 2-5.
CC These peptides may be immobilised on a carrier in the preparation of an
CC absorbing agent which may be used in the treatment of diseases realated
CC to anti-DNA antibodies and/or immune compex.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 15; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              | | | |
Db          1 WFFWFF 6
```

RESULT 24
AAB01492
ID AAB01492 standard; peptide; 6 AA.
XX
AC AAB01492;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Claim 6; Page 2; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 21; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              | | | |
Db          1 WVRWHF 6
```

RESULT 25
AAB01497
ID AAB01497 standard; peptide; 6 AA.
XX
AC AAB01497;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 2
FT /note= "Any amino acid"
FT Misc-difference 3
FT /note= "Any amino acid"
FT Misc-difference 5
FT /note= "Any amino acid"
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Claim 4; Page 9; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 21; Length 6;
Best Local Similarity 100.0%; Pred. No. 9.3e+05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              ||||||
Db          1 WXXWXF 6
```

RESULT 26
AAB01499
ID AAB01499 standard; peptide; 6 AA.
XX

```
AC   AAB01499;
XX
DT   08-NOV-2000  (first entry)
XX
DE   Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW   DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW   activation; transcription; apoptosis; proliferative disorder;
KW   psoriasis; restenosis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 2
FT                   /note= "Any amino acid"
FT   Misc-difference 3
FT                   /note= "Any amino acid"
XX
PN   WO200044771-A1.
XX
PD   03-AUG-2000.
XX
PF   26-JAN-2000; 2000WO-GB00227.
XX
PR   26-JAN-1999;   99GB-0001710.
XX
PA   (PROL-) PROLIFIX LTD.
XX
PI   Mueller R,  Kontermann RE,  Montigiani S;
XX
DR   WPI; 2000-532806/48.
XX
PT   Peptides binding to the DNA binding domain of transcription factor E2F
PT   and inhibiting cell cycle progression, useful for the treatment of
PT   cancer
XX
PS   Claim 4; Page 9; 42pp; English.
XX
CC   Peptides which bind to the DNA binding domain of transcription
CC   factor E2F and inhibit cell cycle progression may be useful as
CC   research agents to investigate the interaction between E2F and DP-1,
CC   or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC   may also be used for inducing apoptosis and/or cell cycle arrest in
CC   a cell, particularly for treatment of cancer or other proliferative
CC   disorders such as psoriasis and restenosis.
XX
SQ   Sequence   6 AA;

  Query Match             80.6%;  Score 25;  DB 21;  Length 6;
  Best Local Similarity   83.3%;  Pred. No. 9.3e+05;
  Matches    5;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |||| |
Db          1 WXXWHF 6


RESULT 27
ABR44865
ID   ABR44865 standard; Peptide; 6 AA.
XX
AC   ABR44865;
XX
DT   10-JUN-2003  (first entry)
XX
DE   Staphylococcus aureus CHIPS-related peptide #55.
XX
KW   CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW   formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW   inflammation; cardiovascular disease; central nervous system disease;
KW   gastrointestinal disease; skin disease; genitourinary disease;
KW   joint disease; respiratory disease; HIV infection; antiinflammatory;
KW   cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW   gynecological; immunosuppressive; anti-HIV.
XX
OS   Staphylococcus aureus.
OS   Synthetic.
XX
PN   WO2003006048-A1.
XX
PD   23-JAN-2003.
XX
PF   11-JUL-2001; 2001WO-EP08004.
XX
PR   11-JUL-2001; 2001WO-EP08004.
XX
PA   (JARI-) JARI PHARM BV.
XX
PI   Van Kessel CPM,  Gosselaar-de Haas CJC,  Kruijtzer JAW;
PI   Van Strijp JAG;
XX
DR   WPI; 2003-247783/25.
XX
PT   Combination of peptides derived from chemotaxis inhibiting protein from
PT   Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT   prophylaxis and treatment of inflammation, cardiovascular, skin and
PT   kidney diseases  -
XX
PS   Disclosure; Page 10; 89pp; English.
XX
CC   The present invention relates to peptides (ABR44811-ABR47162 and
CC   ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC   from Staphylococcus aureus. The peptide fragments are useful in the
CC   prophylaxis or treatment of diseases or disorders involving the
CC   C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC   neutrophils, monocytes and endothelial cells or involving acute or
CC   chronic inflammation reactions. The diseases or disorders include
CC   cardiovascular diseases, disease of the central nervous system,
CC   gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC   diseases, respiratory diseases and HIV infection.
XX
SQ   Sequence   6 AA;

  Query Match             80.6%;  Score 25;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | |
Db          1 WSFWPF 6


RESULT 28
ABR44866
ID   ABR44866 standard; Peptide; 6 AA.
XX
AC   ABR44866;
XX
DT   10-JUN-2003  (first entry)
XX
DE   Staphylococcus aureus CHIPS-related peptide #56.
XX
KW   CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW   formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW   inflammation; cardiovascular disease; central nervous system disease;
KW   gastrointestinal disease; skin disease; genitourinary disease;
KW   joint disease; respiratory disease; HIV infection; antiinflammatory;
KW   cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW   gynecological; immunosuppressive; anti-HIV.
XX
OS   Staphylococcus aureus.
OS   Synthetic.
XX
PN   WO2003006048-A1.
XX
PD   23-JAN-2003.
```

XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 10; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WTFWPF 6

RESULT 29
ABR45311
ID ABR45311 standard; Peptide; 6 AA.
XX
AC ABR45311;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #501.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WFFWFF 6

RESULT 30
ABR45312
ID ABR45312 standard; Peptide; 6 AA.
XX
AC ABR45312;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #502.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -

XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WIFWFF 6

RESULT 31
ABR45367
ID ABR45367 standard; Peptide; 6 AA.
XX
AC ABR45367;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #557.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WFFWIF 6

RESULT 32
ABR45368
ID ABR45368 standard; Peptide; 6 AA.
XX
AC ABR45368;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #558.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 12; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

```
  Query Match             80.6%;  Score 25;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | |
Db          1 WIFWIF 6
```

```
RESULT 33
ABR45423
ID   ABR45423 standard; Peptide; 6 AA.
XX
AC   ABR45423;
XX
DT   10-JUN-2003  (first entry)
XX
DE   Staphylococcus aureus CHIPS-related peptide #613.
XX
KW   CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW   formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW   inflammation; cardiovascular disease; central nervous system disease;
KW   gastrointestinal disease; skin disease; genitourinary disease;
KW   joint disease; respiratory disease; HIV infection; antiinflammatory;
KW   cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW   gynecological; immunosuppressive; anti-HIV.
XX
OS   Staphylococcus aureus.
OS   Synthetic.
XX
PN   WO2003006048-A1.
XX
PD   23-JAN-2003.
XX
PF   11-JUL-2001; 2001WO-EP08004.
XX
PR   11-JUL-2001; 2001WO-EP08004.
XX
PA   (JARI-) JARI PHARM BV.
XX
PI   Van Kessel CPM,  Gosselaar-de Haas CJC,  Kruijtzer JAW;
PI   Van Strijp JAG;
XX
DR   WPI; 2003-247783/25.
XX
PT   Combination of peptides derived from chemotaxis inhibiting protein from
PT   Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT   prophylaxis and treatment of inflammation, cardiovascular, skin and
PT   kidney diseases  -
XX
PS   Disclosure; Page 12; 89pp; English.
XX
CC   The present invention relates to peptides (ABR44811-ABR47162 and
CC   ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC   from Staphylococcus aureus. The peptide fragments are useful in the
CC   prophylaxis or treatment of diseases or disorders involving the
CC   C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC   neutrophils, monocytes and endothelial cells or involving acute or
CC   chronic inflammation reactions. The diseases or disorders include
CC   cardiovascular diseases, disease of the central nervous system,
CC   gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC   diseases, respiratory diseases and HIV infection.
XX
SQ   Sequence  6 AA;
```

```
  Query Match             80.6%;  Score 25;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | |
Db          1 WFFWLF 6
```

```
RESULT 34
ABR45424
ID   ABR45424 standard; Peptide; 6 AA.
XX
AC   ABR45424;
XX
DT   10-JUN-2003  (first entry)
XX
DE   Staphylococcus aureus CHIPS-related peptide #614.
XX
KW   CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW   formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW   inflammation; cardiovascular disease; central nervous system disease;
KW   gastrointestinal disease; skin disease; genitourinary disease;
KW   joint disease; respiratory disease; HIV infection; antiinflammatory;
KW   cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW   gynecological; immunosuppressive; anti-HIV.
XX
OS   Staphylococcus aureus.
OS   Synthetic.
XX
PN   WO2003006048-A1.
XX
PD   23-JAN-2003.
XX
PF   11-JUL-2001; 2001WO-EP08004.
XX
PR   11-JUL-2001; 2001WO-EP08004.
XX
PA   (JARI-) JARI PHARM BV.
XX
PI   Van Kessel CPM,  Gosselaar-de Haas CJC,  Kruijtzer JAW;
PI   Van Strijp JAG;
XX
DR   WPI; 2003-247783/25.
XX
PT   Combination of peptides derived from chemotaxis inhibiting protein from
PT   Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT   prophylaxis and treatment of inflammation, cardiovascular, skin and
PT   kidney diseases  -
XX
PS   Disclosure; Page 12; 89pp; English.
XX
CC   The present invention relates to peptides (ABR44811-ABR47162 and
CC   ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC   from Staphylococcus aureus. The peptide fragments are useful in the
CC   prophylaxis or treatment of diseases or disorders involving the
CC   C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC   neutrophils, monocytes and endothelial cells or involving acute or
CC   chronic inflammation reactions. The diseases or disorders include
CC   cardiovascular diseases, disease of the central nervous system,
CC   gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC   diseases, respiratory diseases and HIV infection.
XX
SQ   Sequence  6 AA;
```

```
  Query Match             80.6%;  Score 25;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | |
Db          1 WIFWLF 6
```

```
RESULT 35
ABR45479
ID   ABR45479 standard; Peptide; 6 AA.
XX
AC   ABR45479;
XX
DT   10-JUN-2003  (first entry)
```

XX
DE Staphylococcus aureus CHIPS-related peptide #669.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WFFWVF 6

RESULT 36
ABR45480
ID ABR45480 standard; Peptide; 6 AA.
XX
AC ABR45480;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #670.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WIFWVF 6

RESULT 37
ABR45537
ID ABR45537 standard; Peptide; 6 AA.
XX
AC ABR45537;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #727.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX

PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WSFWWF 6

RESULT 38
ABR45538
ID ABR45538 standard; Peptide; 6 AA.
XX
AC ABR45538;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #728.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WTFWWF 6

RESULT 39
ABR45591
ID ABR45591 standard; Peptide; 6 AA.
XX
AC ABR45591;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #781.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and

PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WFFWYF 6

RESULT 40
ABR45592
ID ABR45592 standard; Peptide; 6 AA.
XX
AC ABR45592;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #782.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 80.6%; Score 25; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWXF 6
| | |
Db 1 WIFWYF 6

RESULT 41
AAM45777
ID AAM45777 standard; Peptide; 7 AA.
XX
AC AAM45777;
XX
DT 25-OCT-2001 (first entry)
XX
DE H11 binding site consensus conforming peptide (CCP) #2048.
XX
KW Antigen-binding; tumour; diagnosis; stress protein-peptide complex; SPPC;
KW immunogenically cross-reactive; cancer; immunogenic cancer cell;
KW cytostatic; vaccine; tumour-specific immunogenic response inducer;
KW astrocytoma; fibrosarcoma; myxosarcoma; liposarcoma; oligodendroglioma;
KW ependymoma; medulloblastoma; primitive neural ectodermal tumour.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN CA2290722-A1.
XX
PD 08-JUN-2001.
XX
PF 08-DEC-1999; 99CA-2290722.
XX
PR 08-DEC-1999; 99CA-2290722.
XX
PA (NOVO-) NOVOPHARM BIOTECH INC.
XX
PI Kaplan HA, Maiti PK, Fast DG, Herman W, Dan MD, Lewis KE;
PI Entwistle JM, MacDonald GC;
XX
DR WPI; 2001-425937/46.
XX
PT Composition useful for treating and diagnosing cancer, comprises stress
PT protein-peptide complexes associated with tumor, and isolated
PT antigen-binding fragments of an antibody that binds specifically to the
PT complex -
XX
PS Example 4; Page 108; 154pp; English.
XX
CC The present invention describes a composition (I) comprising stress
CC protein-peptide complexes (SPPC) associated with tumours that is
CC specifically immunogenically cross-reactive with cell surface-associated
CC SPPCs specific to target cancer (TC). Also described is an isolated
CC antigen-binding fragment of an antibody that binds specifically to SPPCs
CC or a population of different SPPCs consisting of immunogenic cancer cell
CC surface-associated SPPC of TC. (I) has cytostatic activity and can be
CC used in vaccine production and as a tumour-specific immunogenic response
CC inducer. (I) is useful for treating 71 types of cancers or tumours in a
CC subject, such as astrocytoma, fibrosarcoma, myxosarcoma, liposarcoma,
CC oligodendroglioma, ependymoma, medulloblastoma, and primitive neural
CC ectodermal tumour (PNET). (I) is useful as cancer immunogen including
CC vaccines. (I) is useful for diagnostic and palliative use, for detecting
CC or imaging cancer cells, and to monitor the course of amelioration of

CC malignancy in an individual. AAM43707 to AAM47109 represent peptides
CC which are used in the exemplification of the present invention.
XX
SQ Sequence 7 AA;

Query Match 80.6%; Score 25; DB 22; Length 7;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              |  | |
Db          1 WRRWNF 6
```

RESULT 42
AAB01498
ID AAB01498 standard; peptide; 9 AA.
XX
AC AAB01498;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 2
FT /note= "Any amino acid"
FT Misc-difference 3
FT /note= "Any amino acid"
FT Misc-difference 5
FT /note= "Any amino acid"
FT Misc-difference 7
FT /note= "Any amino acid"
FT Misc-difference 8
FT /note= "Any amino acid"
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Claim 4; Page 9; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 9 AA;

Query Match 80.6%; Score 25; DB 21; Length 9;
Best Local Similarity 100.0%; Pred. No. 9.3e+05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 WXXWXF 6
              ||||||
Db          1 WXXWXF 6
```

RESULT 43
AAB20714
ID AAB20714 standard; peptide; 11 AA.
XX
AC AAB20714;
XX
DT 20-DEC-2000 (first entry)
XX
DE Polymeric immunoglobulin receptor binding domain peptide SEQ ID NO:30.
XX
KW Polymeric immunoglobulin receptor; pIgR; binding domain; diagnosis;
KW identification; infection; cancer; asthma; antiasthmatic; cytostatic;
KW antiinflammatory; antiinfectious; antidiarrhoeal; hepatotropic;
KW virucide; vasotropic; anti-human immunodeficiency virus; antibacterial;
KW mucosal epithelia; bronchitis; emphysema; cystic fibrosis; dysphagia;
KW bronchiectasis; bronchiolitis; pulmonary oedema; viral tracheobronchitis;
KW sleep apnea syndrome; infectious disease; neoplastic condition;
KW Loffler's syndrome; kyphocliosis; peptic ulcer; diarrhoeal disease;
KW ulcerative colitis; Crohn's disease; hepatitis; cirrhosis; haemorrhoid;
KW systemic vasculitis; acquired immunodeficiency syndrome; gonorrhea;
KW syphilis; chlamydia; antiulcer.
XX
OS Homo sapiens.
XX
PN WO200047611-A2.
XX
PD 17-AUG-2000.
XX
PF 11-FEB-2000; 2000WO-US03650.
XX
PR 12-FEB-1999; 99US-0119932.
XX
PA (OKLA-) OKLAHOMA MEDICAL RES FOUND.
PA (TEXA) UNIV TEXAS SYSTEM.
PA (DGIB-) DGI BIOTECHNOLOGIES.
XX
PI Capra JD, White K, Hexham JM, Mandecki W;
XX
DR WPI; 2000-549134/50.
XX
PT Novel polypeptides containing pIgR-binding domains used for targeting
PT and transport to the mucosal epithelia, in the treatment of disorders
PT accessible to the mucosal epithelia, e.g. asthma -
XX
PS Claim 12; Fig 2; 139pp; English.
XX
CC The present invention describes a 10-50 residue peptide (I) comprising
CC a polymeric immunoglobulin receptor (pIgR)-binding domain. (I) can have
CC antiasthmatic, antiinflammatory, antiinfectious, cytostatic, antiulcer,
CC antidiarrhoeal, hepatotropic, virucide, vasotropic, anti-human
CC immunodeficiency virus and antibacterial activities. (I) can be used
CC for targeting and transport to the mucosal epithelium, for the
CC prevention or treatment of diseases, ailments or conditions that are
CC accessible to mucosal epithelia, including asthma, bronchitis, emphysema,
CC cystic fibrosis, bronchiectasis, bronchiolitis, pulmonary oedema, viral
CC tracheobronchitis, sleep apnea syndrome, infectious diseases, neoplastic
CC conditions, Loffler's syndrome, kyphocliosis, dysphagia, peptic ulcers,
CC diarrhoeal diseases, ulcerative colitis, Crohn's disease, hepatitis,
CC cirrhosis, haemorrhoids, systemic vasculitis, acquired immunodeficiency
CC syndrome, gonorrhea, syphilis and chlamydia. (I) can be attached to a
CC detectable label for use in diagnostics. The present sequence represents
CC a specifically claimed example of (I), derived from the human C-alpha-3
CC domain amino acid sequence.
XX
SQ Sequence 11 AA;

```
  Query Match             80.6%;  Score 25;  DB 21;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 2.8e+02;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | | |
Db          3 WWSWLF 8
```

```
RESULT 44
AAW38112
ID   AAW38112 standard; Peptide; 13 AA.
XX
AC   AAW38112;
XX
DT   23-APR-1998  (first entry)
XX
DE   Dystrophin WW domain binding peptide 5.
XX
KW   Peptide recognition unit; WW domain; cell signalling; growth regulation;
KW   cytoskeleton organisation; targeted drug screening; modulator;
KW   WW domain interaction; dystrophin.
XX
OS   Synthetic.
XX
PN   WO9737223-A1.
XX
PD   09-OCT-1997.
XX
PF   03-APR-1997;   97WO-US05547.
XX
PR   03-APR-1996;   96US-0630916.
XX
PA   (CYTO-) CYTOGEN CORP.
PA   (UYNC-) UNIV NORTH CAROLINA.
XX
PI   Fowlkes DM,  Kay BK,  Pirozzi G;
XX
DR   WPI; 1997-503234/46.
XX
PT   Identifying cell signalling and growth regulatory polypeptides by
PT   reaction with multivalent recognition complex - polypeptides are
PT   useful in targetted drug selection
XX
PS   Example 2; Page 78; 220pp; English.
XX
CC   Peptides AAW38108-13 function as recognition units of the dystrophin
CC   WW domain. They were identified from a random peptide phage display
CC   library using the dystrophin WW domain as a probe. The peptides were
CC   used as probes themselves to screen a lambda-EXlox mouse 16 day embryo
CC   cDNA expression library. In this way, cDNA clones expressing proteins,
CC   containing WW domains, capable of binding to these peptides are
CC   identified. The WW domain is a small functional domain found in a large
CC   number of proteins from a variety of species including humans, nematodes
CC   and yeast. Its name is derived from the observation that two tryptophan
CC   residues, one in the amino terminal portion of the WW domain and one in
CC   the carboxyl terminal portion, are conserved. Most proteins containing
CC   WW domains have a function involving cell signalling and growth
CC   regulation or the organisation of the cytoskeleton. Polypeptides
CC   containing a WW domain are identified by treating a multivalent
CC   recognition unit complex that has selective binding affinity for a WW
CC   domain, with many polypeptides and identifying those with selective
CC   affinity for the complex. Proteins containing WW domains are used for
CC   targeted drug screening, i.e. to identify potential modulators of
CC   specific WW domain interactions. The valency of the recognition unit is
CC   important in determining specificity of interaction with WW domains. In
CC   multivalent form specificity is relaxed, but not lost, so proteins
CC   containing WW domains similar, but not identical, to the sequence of
CC   the peptides' target WW can be detected, including new polypeptides.
XX
SQ   Sequence   13 AA;
```

```
  Query Match             80.6%;  Score 25;  DB 18;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 3.2e+02;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
              |  | | |
Db          5 WEEWEF 10
```

```
RESULT 45
AAE07760
ID   AAE07760 standard; peptide; 14 AA.
XX
AC   AAE07760;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human HLA-DP restricted T cell epitope #4 of NY ESO-1 protein.
XX
KW   Human; major histocompatibility complex; MHC; vaccine; metastasis;
KW   class II restricted T cell epitope; MHC-II epitope; cancer antigen;
KW   NY ESO-1 protein; CD4+ T lymphocyte; human leucocyte antigen; HLA;
KW   tumour-specific humoral-mediated immunity; cancer; cytostatic;
KW   immunotherapy.
XX
OS   Homo sapiens.
XX
PN   WO200155393-A2.
XX
PD   02-AUG-2001.
XX
PF   26-JAN-2001; 2001WO-US02765.
XX
PR   28-JAN-2000; 2000US-0179004.
PR   29-SEP-2000; 2000US-0237107.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Wang R,  Rosenberg SA,  Zeng G;
XX
DR   WPI; 2001-496851/54.
XX
PT   New NY-ESO cancer peptide or MHC class II restricted T cell epitopes,
PT   useful as immunogen and vaccine for inhibiting cancer in a mammal or as
PT   protection from metastasis  -
XX
PS   Claim 65; Page 82; 134pp; English.
XX
CC   The invention relates to the identification and isolation of major
CC   histocompatibility (MHC) class II restricted T cell epitope (MHC-II
CC   epitope) derived from the cancer antigen, NY ESO-1. The MHC-II epitopes
CC   from NY ESO-1 are recognised by CD4+ T lymphocytes in an human leucocyte
CC   antigen (HLA) class II restricted manner, in particular HLA-DR or HLA-DP
CC   restricted. The products of the gene are promising candidates for
CC   immunotherapeutic strategies for the prevention, treatment and diagnosis
CC   of patients with cancer. The cancer epitopes are useful as immunogen and
CC   vaccine to inhibit or to prevent cancer in a mammal by eliciting CD4+ T
CC   lymphocytes resulting in protection of the recipient from development of
CC   cancer and protection from metastasis, or by inhibiting the growth of
CC   cells expressing the NY-ESO-1 gene product. The cancer peptides are also
CC   useful as diagnostic agent to detect the presence of cancer, to enhance
CC   the generation of antibody and/or CD8+ T cell responses against any
CC   given target antigen and/or hapten and to induce tumour-specific
CC   humoral-mediated immunity against cancer. The present sequence is human
CC   HLA-DP restricted T cell epitope of NY ESO-1 protein.
XX
SQ   Sequence   14 AA;

  Query Match             80.6%;  Score 25;  DB 22;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 3.3e+02;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWXF 6
```

| | | |
Db 3 WITWCF 8

Search completed: December 12, 2003, 10:29:03
Job time : 31.3 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:48:05 ; Search time 26.3333 Seconds
(without alignments)
58.797 Million cell updates/sec

Title: US-09-912-414-11
Perfect score: 38
Sequence: 1 WXXWHF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 3526

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_23:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*
16: sp_bacteriap:*
17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	22	57.9	8	13	P79940	P79940 xenopus lae
2	21	55.3	9	2	Q9R5M1	Q9r5m1 staphylococ
3	21	55.3	9	9	Q38366	Q38366 bacteriopha
4	20	52.6	9	8	Q8SHF0	Q8shf0 chamaeleo n
5	20	52.6	12	7	O77919	O77919 pseudotroph
6	20	52.6	13	4	Q16406	Q16406 homo sapien
7	20	52.6	15	2	Q53580	Q53580 rhodobacter
8	19	50.0	8	8	Q94VF6	Q94vf6 varanus job
9	19	50.0	10	13	Q9PRU9	Q9pru9 sparus aura
10	19	50.0	14	8	Q9MT61	Q9mt61 allium cepa
11	19	50.0	14	8	Q9MRV4	Q9mrv4 allium porr
12	19	50.0	14	8	Q9MRV1	Q9mrv1 allium sati
13	19	50.0	14	8	Q9MRT8	Q9mrt8 aloe vera (
14	19	50.0	14	8	Q8HGT1	Q8hgt1 gadus morhu
15	17	44.7	10	8	Q94VD2	Q94vd2 varanus pan
16	17	44.7	13	10	Q8LPV3	Q8lpv3 deschampsia
17	17	44.7	14	6	Q9TQZ1	Q9tqz1 bos taurus
18	17	44.7	14	11	Q9R1G8	Q9r1g8 rattus norv
19	16	42.1	8	8	Q94VC1	Q94vc1 varanus rud
20	16	42.1	8	8	Q9TD02	Q9td02 terranatos
21	16	42.1	8	8	Q9T4Y2	Q9t4y2 asterina pe
22	16	42.1	9	8	Q9T688	Q9t688 gecko gecko
23	16	42.1	10	2	Q47561	Q47561 escherichia
24	16	42.1	10	8	Q9T8K7	Q9t8k7 liolaemus m
25	16	42.1	10	8	Q9T8N1	Q9t8n1 liolaemus p
26	16	42.1	10	8	O79903	O79903 oplurus cuv
27	16	42.1	10	8	Q8W969	Q8w969 anolis orto
28	16	42.1	10	8	Q8WDH8	Q8wdh8 anolis mest
29	16	42.1	10	8	Q9T8T6	Q9t8t6 liolaemus m
30	16	42.1	10	8	Q9T8L3	Q9t8l3 liolaemus l
31	16	42.1	10	8	P92616	P92616 aspidosceli
32	16	42.1	10	8	Q9T8G8	Q9t8g8 liolaemus c
33	16	42.1	10	8	Q958K9	Q958k9 rana boylii
34	16	42.1	10	8	Q9TFU9	Q9tfu9 teratoscinc
35	16	42.1	10	8	Q9T8X7	Q9t8x7 phymaturus
36	16	42.1	10	8	Q958L2	Q958l2 rana tempor
37	16	42.1	10	8	O79885	O79885 anolis pate
38	16	42.1	10	8	Q9T8Q5	Q9t8q5 liolaemus l
39	16	42.1	10	8	P92654	P92654 euprepis au
40	16	42.1	10	8	Q9T8L0	Q9t8l0 liolaemus o
41	16	42.1	10	8	Q9T8W8	Q9t8w8 liolaemus b
42	16	42.1	10	8	Q9T8R4	Q9t8r4 liolaemus p
43	16	42.1	10	8	Q9T8M8	Q9t8m8 liolaemus m
44	16	42.1	10	8	Q9T8S1	Q9t8s1 liolaemus l
45	16	42.1	10	8	Q9T8S4	Q9t8s4 liolaemus c

ALIGNMENTS

RESULT 1
P79940
ID P79940 PRELIMINARY; PRT; 8 AA.
AC P79940;
DT 01-MAY-1997 (TrEMBLrel. 03, Created)
DT 01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE XMeis1-4 protein (Fragment).
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_TaxID=8355;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97202105; PubMed=9049632;
RA Steelman S., Moskow J.J., Muzynski K., North C., Druck T.,
RA Montgomery J.C., Huebner K., Daar I.O., Buchberg A.M.;
RT "Identification of a conserved family of Meis1-related homeobox
RT genes.";
RL Genome Res. 7:142-156(1997).
DR EMBL; U68389; AAB19199.1; -.
DR TRANSFAC; T03410; -.
FT NON_TER 1 1
SQ SEQUENCE 8 AA; 1187 MW; 278B51F37B11F40B CRC64;

Query Match 57.9%; Score 22; DB 13; Length 8;
Best Local Similarity 66.7%; Pred. No. 8.3e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```
Qy          4 WHF 6
              ||:
Db          5 WHY 7
```

RESULT 2
Q9R5M1
ID Q9R5M1 PRELIMINARY; PRT; 9 AA.
AC Q9R5M1;

```
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE   66 kDa cell surface adhesin for heparan sulfate (Fragment).
OS   Staphylococcus aureus.
OC   Bacteria; Firmicutes; Bacillales; Staphylococcus.
OX   NCBI_TaxID=1280;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=92176005; PubMed=1541563;
RA   Liang O.D., Ascencio F., Fransson L.A., Wadstrom T.;
RT   "Binding of heparan sulfate to Staphylococcus aureus.";
RL   Infect. Immun. 60:899-906(1992).
FT   NON_TER       1      1
FT   NON_TER       9      9
SQ   SEQUENCE   9 AA;  990 MW;  2289DDD7337861B3 CRC64;

  Query Match             55.3%;  Score 21;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          2 WTGW 5


RESULT 3
Q38366
ID   Q38366      PRELIMINARY;      PRT;     9 AA.
AC   Q38366;
DT   01-NOV-1996 (TrEMBLrel. 01, Created)
DT   01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   E gene product (Fragment).
OS   Bacteriophage phi-X174.
OC   Viruses; ssDNA viruses; Microviridae; Microvirus.
OX   NCBI_TaxID=10847;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=88118956; PubMed=2963134;
RA   Buckley K.J., Hayashi M.;
RT   "Role of premature translational termination in the regulation of
RT   expression of the phiX174 lysis gene.";
RL   J. Mol. Biol. 198:599-607(1987).
DR   EMBL; X07809; CAA30668.1; -.
FT   NON_TER       9      9
SQ   SEQUENCE   9 AA;  1207 MW;  C093B37731B36412 CRC64;

  Query Match             55.3%;  Score 21;  DB 9;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          4 WTLW 7


RESULT 4
Q8SHF0
ID   Q8SHF0      PRELIMINARY;      PRT;     9 AA.
AC   Q8SHF0;
DT   01-JUN-2002 (TrEMBLrel. 21, Created)
DT   01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT   01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Chamaeleo namaquensis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Iguania; Acrodonta; Chamaeleonidae; Chamaeleo.
OX   NCBI_TaxID=179917;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Townsend T.M., Larson A.L.;
RT   "Molecular Phylogenetics and Mitochondrial Genomic Evolution in the
RT   Chamaeleonidae (Reptilia, Squamata).";
RL   Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AF448757; AAL90553.1; -.
KW   Mitochondrion.
FT   NON_TER       9      9
SQ   SEQUENCE   9 AA;  1205 MW;  358CB72733640733 CRC64;

  Query Match             52.6%;  Score 20;  DB 8;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          2 WLRW 5


RESULT 5
O77919
ID   O77919      PRELIMINARY;      PRT;     12 AA.
AC   O77919;
DT   01-NOV-1998 (TrEMBLrel. 08, Created)
DT   01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   MHC class II B locus 4 (Fragment).
OS   Pseudotropheus sp. 'Pseudotropheus tropheops complex'.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC   Cichlidae; Pseudotropheus.
OX   NCBI_TaxID=51796;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=98315113; PubMed=9649539;
RA   Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA   Figueroa F., Sultmann H., Klein J.;
RT   "Linkage relationships and haplotype polymorphism among cichlid mhc
RT   class II B loci.";
RL   Genetics 149:1527-1537(1998).
DR   EMBL; AF050032; AAC41371.1; -.
FT   NON_TER       1      1
FT   NON_TER      12     12
SQ   SEQUENCE   12 AA;  1529 MW;  6C2ABFACD5A5B734 CRC64;

  Query Match             52.6%;  Score 20;  DB 7;  Length 12;
  Best Local Similarity   50.0%;  Pred. No. 2.3e+03;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          1 WDFW 4


RESULT 6
Q16406
ID   Q16406      PRELIMINARY;      PRT;     13 AA.
AC   Q16406;
DT   01-NOV-1996 (TrEMBLrel. 01, Created)
DT   01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT   01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
DE   GHRH-R protein (Fragment).
GN   GHRH-R.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=96001284; PubMed=7559877;
RA   Hashimoto K., Koga M., Motomura T., Kasayama S., Kouhara H.,
RA   Ohnishi T., Arita N., Hayakawa T., Sato B., Kishimoto T.;
RT   "Identification of alternatively spliced messenger ribonucleic acid
```

```
RT   encoding truncated growth hormone-releasing hormone receptor in human
RT   pituitary adenomas.";
RL   J. Clin. Endocrinol. Metab. 80:2933-2939(1995).
DR   EMBL; S79912; AAD14318.1; -.
FT   NON_TER       1      1
SQ   SEQUENCE   13 AA;  1612 MW;  CE19D7D255D66362 CRC64;

  Query Match             52.6%;  Score 20;  DB 4;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 2.5e+03;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          7 WGYW 10


RESULT 7
Q53580
ID   Q53580      PRELIMINARY;      PRT;    15 AA.
AC   Q53580;
DT   01-NOV-1996 (TrEMBLrel. 01, Created)
DT   01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Light-harvesting complex I alpha polypeptide (Fragment).
GN   PUFA.
OS   Rhodobacter capsulatus (Rhodopseudomonas capsulata).
OC   Bacteria; Proteobacteria; Alphaproteobacteria; Rhodobacterales;
OC   Rhodobacteraceae; Rhodobacter.
OX   NCBI_TaxID=1061;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=92234963; PubMed=1569029;
RA   Richter P., Brand M., Drews G.;
RT   "Characterization of LHI- and LHI+ Rhodobacter capsulatus pufA
RT   mutants.";
RL   J. Bacteriol. 174:3030-3041(1992).
DR   EMBL; S97552; AAC60406.1; -.
FT   NON_TER      15     15
SQ   SEQUENCE   15 AA;  2054 MW;  3561FE413591D31A CRC64;

  Query Match             52.6%;  Score 20;  DB 2;  Length 15;
  Best Local Similarity   50.0%;  Pred. No. 2.8e+03;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              |  |
Db          8 WKIW 11


RESULT 8
Q94VF6
ID   Q94VF6      PRELIMINARY;      PRT;     8 AA.
AC   Q94VF6;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Varanus jobiensis.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OX   NCBI_TaxID=169843;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407507; AAL10075.1; -.
KW   Mitochondrion.
FT   NON_TER       8      8
SQ   SEQUENCE   8 AA;  1144 MW;  EFD729DB436411A6 CRC64;

  Query Match             50.0%;  Score 19;  DB 8;  Length 8;
  Best Local Similarity   66.7%;  Pred. No. 8.3e+05;
  Matches    2;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 WHF 6
              |:|
Db          4 WYF 6


RESULT 9
Q9PRU9
ID   Q9PRU9      PRELIMINARY;      PRT;    10 AA.
AC   Q9PRU9;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DE   Gonadotropin-releasing hormone, SBGNRH-I.
OS   Sparus aurata (Gilthead sea bream).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
OC   Sparidae; Sparus.
OX   NCBI_TaxID=8175;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=95083645; PubMed=7991588;
RA   Powell J.F., Zohar Y., Elizur A., Park M., Fischer W.H., Craig A.G.,
RA   Rivier J.E., Lovejoy D.A., Sherwood N.M.;
RT   "Three forms of gonadotropin-releasing hormone characterized from
RT   brains of one species.";
RL   Proc. Natl. Acad. Sci. U.S.A. 91:12081-12085(1994).
SQ   SEQUENCE   10 AA;  1132 MW;  81566865AB587735 CRC64;

  Query Match             50.0%;  Score 19;  DB 13;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 2.8e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 WH 5
              ||
Db          8 WH 9


RESULT 10
Q9MT61
ID   Q9MT61      PRELIMINARY;      PRT;    14 AA.
AC   Q9MT61;
DT   01-OCT-2000 (TrEMBLrel. 15, Created)
DT   01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT   01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE   PSI 9 kDa protein (Fragment).
GN   PSAC.
OS   Allium cepa (Onion).
OG   Chloroplast.
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Alliaceae;
OC   Allium.
OX   NCBI_TaxID=4679;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Leaf;
RA   Lopez-Serrano M., del Campo E.M., Sabater B., Martin M.;
RT   "Conservation of the start codon by editing in ndhD-encoded
RT   transcripts is not restricted to dicotyledonous plants.";
RL   Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AJ278350; CAB96183.1; -.
KW   Chloroplast.
FT   NON_TER       1      1
SQ   SEQUENCE   14 AA;  1744 MW;  8F14FD03E3B7D911 CRC64;

  Query Match             50.0%;  Score 19;  DB 8;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.8e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          4 WH 5
              ||
Db          3 WH 4


RESULT 11
Q9MRV4
ID   Q9MRV4      PRELIMINARY;      PRT;    14 AA.
AC   Q9MRV4;
DT   01-OCT-2000 (TrEMBLrel. 15, Created)
DT   01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT   01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE   PSI 9 kDa protein (Fragment).
GN   PSAC.
OS   Allium porrum (Leek).
OG   Chloroplast.
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Alliaceae;
OC   Allium.
OX   NCBI_TaxID=4681;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Leaf;
RA   Lopez-Serrano M., del Campo E.M., Sabater B., Martin M.;
RT   "Conservation of the start codon by editing in ndhD-encoded
RT   transcripts is not restricted to dicotyledonous plants.";
RL   Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AJ278352; CAB96185.1; -.
KW   Chloroplast.
FT   NON_TER       1      1
SQ   SEQUENCE   14 AA;  1744 MW;  8F14FD03E3B7D911 CRC64;

  Query Match             50.0%;  Score 19;  DB 8;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.8e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 WH 5
              ||
Db          3 WH 4


RESULT 12
Q9MRV1
ID   Q9MRV1      PRELIMINARY;      PRT;    14 AA.
AC   Q9MRV1;
DT   01-OCT-2000 (TrEMBLrel. 15, Created)
DT   01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT   01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE   PSI 9 kDa protein (Fragment).
GN   PSAC.
OS   Allium sativum (Garlic).
OG   Chloroplast.
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Alliaceae;
OC   Allium.
OX   NCBI_TaxID=4682;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Leaf;
RA   Lopez-Serrano M., del Campo E.M., Sabater B., Martin M.;
RT   "Conservation of the start codon by editing in ndhD-encoded
RT   transcripts is not restricted to dicotyledonous plants.";
RL   Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AJ278351; CAB96187.1; -.
KW   Chloroplast.
FT   NON_TER       1      1
SQ   SEQUENCE   14 AA;  1744 MW;  8F14FD03E3B7D911 CRC64;

  Query Match             50.0%;  Score 19;  DB 8;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.8e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 WH 5
              ||
Db          3 WH 4


RESULT 13
Q9MRT8
ID   Q9MRT8      PRELIMINARY;      PRT;    14 AA.
AC   Q9MRT8;
DT   01-OCT-2000 (TrEMBLrel. 15, Created)
DT   01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   PSI 9 kDa protein (Fragment).
GN   PSAC.
OS   Aloe vera (Aloe) (Aloe barbadensis).
OG   Chloroplast.
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Asphodelaceae;
OC   Aloe.
OX   NCBI_TaxID=34199;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Leaf;
RA   Lopez-Serrano M., del Campo E.M., Sabater B., Martin M.;
RT   "Conservation of the start codon by editing in ndhD-encoded
RT   transcripts is not restricted to dicotyledonous plants.";
RL   Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AJ278353; CAB96192.1; -.
KW   Chloroplast.
FT   NON_TER       1      1
SQ   SEQUENCE   14 AA;  1744 MW;  8F14FD03E3B7D911 CRC64;

  Query Match             50.0%;  Score 19;  DB 8;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.8e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 WH 5
              ||
Db          3 WH 4


RESULT 14
Q8HGT1
ID   Q8HGT1      PRELIMINARY;      PRT;    14 AA.
AC   Q8HGT1;
DT   01-MAR-2003 (TrEMBLrel. 23, Created)
DT   01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT   01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE   ATPase 8 (Fragment).
OS   Gadus morhua (Atlantic cod).
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae; Gadus.
OX   NCBI_TaxID=8049;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=ATPRK3;
RA   Taylor M.I., Fox C., Rico I., Rico C.;
RT   "Species-specific TaqMan probes for simultaneous identification of
RT   (Gadus morhua L.), haddock (Melanogrammus aeglefinus L.) and whiting
RT   (Merlangius merlangus L.).";
RL   Mol. Ecol. Notes 2:599-601(2002).
DR   EMBL; AF526615; AAN85062.1; -.
KW   Mitochondrion.
FT   NON_TER       1      1
SQ   SEQUENCE   14 AA;  1753 MW;  D4AF852330085E6D CRC64;

  Query Match             50.0%;  Score 19;  DB 8;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 3.8e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          4 WH 5
              ||
```

```
Db          13 WH 14


RESULT 15
Q94VD2
ID   Q94VD2       PRELIMINARY;       PRT;    10 AA.
AC   Q94VD2;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT   01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE   Cytochrome c oxidase subunit I (Fragment).
GN   COI.
OS   Varanus panoptes panoptes.
OG   Mitochondrion.
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OX   NCBI_TaxID=169849;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Ast J.C.;
RT   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RL   Cladistics 17:0-0(2001).
DR   EMBL; AF407516; AAL10102.1; -.
KW   Mitochondrion.
FT   NON_TER      10     10
SQ   SEQUENCE   10 AA;  1299 MW;  5DEE80D4136411A7 CRC64;

  Query Match             44.7%;  Score 17;  DB 8;  Length 10;
  Best Local Similarity   66.7%;  Pred. No. 6e+03;
  Matches    2;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 WHF 6
              | ||
Db          6 WRF 8


Search completed: December  3, 2003, 11:53:25
Job time : 27.3333 secs
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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:44:20 ; Search time 33.6667 Seconds
(without alignments)
28.288 Million cell updates/sec

Title: US-09-912-414-11
Perfect score: 38
Sequence: 1 WXXWHF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 350435

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_19Jun03:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	35	92.1	6	21	AAB01505	Peptide which bind
2	35	92.1	6	21	AAB01506	Peptide which bind
3	34	89.5	6	21	AAB01492	Peptide which bind
4	34	89.5	6	21	AAB01499	Peptide which bind
5	29	76.3	6	24	ABR45593	Staphylococcus aur
6	29	76.3	6	24	ABR45594	Staphylococcus aur
7	29	76.3	14	22	AAM00214	Human angiopoietin
8	28	73.7	6	18	AAW28912	Opioid peptide. S
9	28	73.7	6	18	AAR93770	New peptide which
10	28	73.7	6	20	AAY23019	Opioid peptide whi
11	28	73.7	6	21	AAB01509	Peptide which bind
12	28	73.7	6	24	ABR45591	Staphylococcus aur
13	28	73.7	6	24	ABR45592	Staphylococcus aur
14	28	73.7	7	20	AAY01258	US5851813 peptide
15	28	73.7	7	22	AAB49729	Peptide SEQ ID 40
16	28	73.7	8	15	AAR60429	Antiproliferative
17	28	73.7	8	15	AAR60444	Antiproliferative
18	28	73.7	8	16	AAR83499	Zif268 mutagenised
19	28	73.7	8	20	AAY01261	US5851813 peptide
20	28	73.7	8	20	AAW84388	Finger 3 binding s
21	28	73.7	12	21	AAY88108	Fluorescein bindin
22	28	73.7	12	21	AAY88160	Fluorescein bindin
23	28	73.7	12	22	AAB60032	Internalising pept
24	27	71.1	6	19	AAW83884	Peptide specific a
25	27	71.1	7	22	AAM45777	H11 binding site c
26	27	71.1	8	23	ABB90493	Hominidae LDL rece
27	27	71.1	10	18	AAW32766	Human platelet gly
28	27	71.1	11	22	AAE12188	Polyglutamine-glut
29	27	71.1	13	23	ABP46201	Human BLyS binding
30	26	68.4	6	24	ABR45313	Staphylococcus aur
31	26	68.4	6	24	ABR45314	Staphylococcus aur
32	26	68.4	6	24	ABR47161	Staphylococcus aur
33	26	68.4	6	24	ABR47162	Staphylococcus aur
34	26	68.4	9	23	AAE26775	Fibrin binding pep
35	26	68.4	9	23	AAU93672	Granulocyte-colony
36	26	68.4	12	21	AAY88104	Oregon green 514 b
37	26	68.4	12	21	AAY88154	Oregon green 514 b
38	26	68.4	13	18	AAW38112	Dystrophin WW doma
39	26	68.4	15	20	AAY30351	Epitope derived fr
40	26	68.4	15	23	AAE26759	Fibrin binding pep
41	26	68.4	15	23	AAE19239	Streptococcus pneu
42	25.5	67.1	15	23	ABP57721	Human nucleotide e
43	25	65.8	6	13	AAR24966	Phe-Arg contg. ant
44	25	65.8	6	15	AAR57391	Peptide for treati
45	25	65.8	6	21	AAB01493	Peptide which bind

ALIGNMENTS

RESULT 1
AAB01505
ID AAB01505 standard; peptide; 6 AA.
XX
AC AAB01505;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of

PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 92.1%; Score 35; DB 21; Length 6;
Best Local Similarity 66.7%; Pred. No. 9.3e+05;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              | ·|||
Db          1 WARWHF 6
```

RESULT 2
AAB01506
ID AAB01506 standard; peptide; 6 AA.
XX
AC AAB01506;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 92.1%; Score 35; DB 21; Length 6;
Best Local Similarity 66.7%; Pred. No. 9.3e+05;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              | ·|||
Db          1 WVAWHF 6
```

RESULT 3
AAB01492
ID AAB01492 standard; peptide; 6 AA.
XX
AC AAB01492;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Claim 6; Page 2; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 89.5%; Score 34; DB 21; Length 6;
Best Local Similarity 66.7%; Pred. No. 9.3e+05;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              |  |||
Db          1 WVRWHF 6
```

RESULT 4
AAB01499
ID AAB01499 standard; peptide; 6 AA.
XX
AC AAB01499;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.

XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Misc-difference 2
FT /note= "Any amino acid"
FT Misc-difference 3
FT /note= "Any amino acid"
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Claim 4; Page 9; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

Query Match 89.5%; Score 34; DB 21; Length 6;
Best Local Similarity 100.0%; Pred. No. 9.3e+05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              ||||||
Db          1 WXXWHF 6
```

RESULT 5
ABR45593
ID ABR45593 standard; Peptide; 6 AA.
XX
AC ABR45593;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #783.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 76.3%; Score 29; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              |  |:|
Db          1 WSFWYF 6
```

RESULT 6
ABR45594
ID ABR45594 standard; Peptide; 6 AA.
XX
AC ABR45594;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #784.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;

XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 76.3%; Score 29; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              |  |:|
Db          1 WTFWYF 6
```

RESULT 7
AAM00214
ID AAM00214 standard; Peptide; 14 AA.
XX
AC AAM00214;
XX
DT 01-OCT-2001 (first entry)
XX
DE Human angiopoietin fragment SEQ ID NO: 754.
XX
KW Human; single nucleotide polymorphism; SNP; paternity test;
KW forensic test; aberrant protein expression.
XX
OS Homo sapiens.
XX
PN WO200151670-A2.
XX
PD 19-JUL-2001.
XX
PF 05-JAN-2001; 2001WO-US00322.
XX
PR 07-JAN-2000; 2000US-0174962.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach MD;
XX
DR WPI; 2001-451871/48.
DR N-PSDB; AAH89323.
XX
PT Isolated human polynucleotides containing single nucleotide
PT polymorphisms, useful for the treatment and diagnosis of e.g. cancer,
PT infection and diabetes -
XX
PS Disclosure; Page 321; 475pp; English.
XX
CC The present invention relates to human nucleic acids containing single
CC nucleotide polymorphisms (SNPs). These can be used in forensic and
CC paternity tests, and to aid in the treatment of diseases associated with
CC aberrant protein expression, including cancer, amyloidosis, diabetes,
CC Alzheimer's disease, Down's syndrome, oedema, lupus (SLE), vasculitis,
CC glomerulonephritis, haemolytic anaemia, thrombocytopaenia, arthritis,
CC meningitis, muscular disorders, dementia, neurological diseases, tuberous
CC sclerosis, male infertility, hypercalcaemia, blood pressure disorders,
CC osteoporosis, pathogenic infections, hypercholesterolaemia, obesity or
CC autoimmunity. The present sequence is a peptide encoded by a
CC polymorphism-containing oligonucleotide fragment of the invention.
XX
SQ Sequence 14 AA;

Query Match 76.3%; Score 29; DB 22; Length 14;
Best Local Similarity 60.0%; Pred. No. 1.1e+02;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWH 5
              |  ||
Db          7 WYTWH 11
```

RESULT 8
AAW28912
ID AAW28912 standard; peptide; 6 AA.
XX
AC AAW28912;
XX
DT 20-JAN-1998 (first entry)
XX
DE Opioid peptide.
XX
KW enkephalin; mu-opioid receptor ligand; agonist; antagonist.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "N-acetyl-Arg"
FT Modified-site 6
FT /note= "the C-terminal is in amide form"
XX
PN US5641861-A.
XX
PD 24-JUN-1997.
XX
PF 07-JUN-1995; 95US-0487006.
XX
PR 07-JUN-1995; 95US-0487006.
XX
PA (TORR-) TORREY PINES INST MOLECULAR STUDIES.
XX
PI Dooley CT, Houghten RA;
XX
DR WPI; 1997-340994/31.
XX
PT New opioid peptides which bind mu receptors specifically - have
PT agonist or antagonist activity and are used for study and
PT localisation of mu receptors and to treat peripheral side effects of
PT morphine etc.
XX
PS Disclosure; Column 8; 92pp; English.
XX
CC The patent discloses the following new peptides, which are opioids which
CC bind specifically to the mu receptor: Ac-Phe-Arg-Trp-Trp-Tyr-Xaa-NH2 (1);
CC Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 (2); Trp-Trp-Pro-Lys-His-Xaa-NH2 (3);
CC Trp-Trp-Pro-Xaa1-NH2 (4); Tyr-Pro-Phe-Gly-Phe-Xaa-NH2 (5);
CC D-Ile-D-Met-D-Ser-D-Trp-D-Trp-(Gly)n-Xaa2-NH2 (6);
CC D-Ile-D-Met-D-Thr-D-Trp-Gly-Xaa2-NH2 (7); Tyr-A1-B2-C3-NH2 (214);
CC Pm and red ((Me)x(H)y-Tyr-(NMe)z-Tyr-(Xaa3)z-NH2) (221); and
CC Trp-Trp-Pro-D4-(His)z-(Xaa)z-NH2 (222); where Xaa = any natural amino
CC acid; Xaa1 = Lys or Arg; n and z = 0 or 1; Xaa2 = Gly or the D form of
CC any naturally occurring amino acid; A1 = D-norvaline or D-norleucine;
CC B2 = Gly, Phe or Trp; C3 = Trp or naphthylalanine; x and y = 0-2, but
CC not over 2 in total; Xaa3 = Phe, DPhe or benzylamino; D4 = Lys or Arg;
CC Pm and red indicate permethylation and reduction of all CO in peptide
CC links to methylene. These new compounds are useful: (i) for in vitro

```
CC   assay and study of opiate receptor subtypes, particularly mu receptors
CC   in the brain; (ii) for in vivo localisation of receptor subtypes; and
CC   (iii) therapeutically to block the peripheral effects (e.g. constipation
CC   and pruritus) of centrally acting pain killers such as morphine.
CC   They are very selective for the mu opioid receptor, over binding to the
CC   delta and kappa receptor subtypes.
CC   The present sequence is a specific example of a peptide (2).
XX
SQ   Sequence   6 AA;

  Query Match             73.7%;  Score 28;  DB 18;  Length 6;
  Best Local Similarity   60.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXWH 5
              |  ||
Db          2 WIGWH 6


RESULT 9
AAR93770
ID   AAR93770 standard; Protein; 6 AA.
XX
AC   AAR93770;
XX
DT   23-SEP-1997  (first entry)
XX
DE   New peptide which acts as mu-opioid receptor ligand.
XX
KW   mu-receptor; opioid; opiate; agonist; antagonist; diagnosis;
KW   analgesic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "N-acetyl-Arg"
FT   Misc-difference 6
FT                   /note= "this residue is in C-terminal amide form"
XX
PN   WO9640208-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US09321.
XX
PR   07-JUN-1995;   95US-0476438.
XX
PA   (TORR-) TORREY PINES INST MOLECULAR STUDIES.
XX
PI   Dooley CT,  Houghten RA;
XX
DR   WPI; 1997-051895/05.
XX
PT   New mu opioid receptor binding ligand peptide(s) - useful for
PT   in-vitro and in-vivo diagnosis, as analgesics, and for blocking
PT   peripheral effects of centrally acting drugs, e.g. morphine
XX
PS   Disclosure; Page 19; 57pp; English.
XX
CC   The patent discloses eight new groups of opioid peptides which bind
CC   to the mu-receptor to act as agonists or antagonists. The peptides
CC   can be used for in-vitro assays to study opiate receptor subtypes
CC   (especially the mu type) in brain or other tissue samples; and for
CC   in-vivo diagnosis to localise opioid subtypes. The peptides are also
CC   useful as drugs to treat pathologies associated with other compounds
CC   which interact with the opioid receptor system. Therefore they can be
CC   used in medicaments for treating pathologies associated with the mu
CC   receptor and as analgesics. They can be used therapeutically to block
CC   the peripheral effects of centrally acting pain killers, e.g. to
CC   prevent side effects such as constipation and pruritis associated
CC   with morphine. The present sequence represents a specific example
CC   of one of the new groups of peptides, of formula
CC   Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 where Xaa = a naturally occurring
CC   amino acid.
XX
SQ   Sequence   6 AA;

  Query Match             73.7%;  Score 28;  DB 18;  Length 6;
  Best Local Similarity   60.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXWH 5
              |  ||
Db          2 WIGWH 6


RESULT 10
AAY23019
ID   AAY23019 standard; peptide; 6 AA.
XX
AC   AAY23019;
XX
DT   23-AUG-1999  (first entry)
XX
DE   Opioid peptide which inhibits binding of enkephalin.
XX
KW   Opioid peptide; ligand binding; opioid receptor;
KW   micro-selective opioid peptide; enkephalin; opioid receptor system;
KW   blocking; peripheral effect; centrally acting pain killer; morphine.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "acetylated"
FT   Modified-site   6
FT                   /note= "amidated"
XX
PN   US5919897-A.
XX
PD   06-JUL-1999.
XX
PF   07-JUN-1995;   95US-0488659.
XX
PR   07-JUN-1995;   95US-0488659.
XX
PA   (TORR-) TORREY PINES INST MOLECULAR STUDIES.
XX
PI   Dooley CT,  Houghten RA;
XX
DR   WPI; 1999-394647/33.
XX
PT   New opioid peptides useful for blocking the peripheral effects of
PT   centrally acting pain killers such as morphine
XX
PS   Example 1; Column 8; 92pp; English.
XX
CC   The specification describes opioid peptides, in which each of the
CC   N atoms in the peptide backbone between respective amino acids is
CC   modified by permethylation, perallylation, perethylation, perbenzylation
CC   and pernaphthylation. The peptides inhibit ligand binding to an opioid
CC   receptor. Specifically, the peptides inhibit the micro-selective
CC   opioid peptide enkephalin. The peptides can be used in vivo
CC   diagnostically to localize opioid receptor subtypes. They can be used
CC   to treat pathologies associated with other compounds which interact with
CC   the opioid receptor system. The peptides are especially useful for
CC   blocking the peripheral effects of centrally acting pain killers such
CC   as morphine. AAY23005-Y23024 represent opioid peptides of the invention,
CC   and are derived from the general sequence given in AAY23004.
XX
SQ   Sequence   6 AA;

  Query Match             73.7%;  Score 28;  DB 20;  Length 6;
  Best Local Similarity   60.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
```

```
Qy          1 WXXWH 5
              |  ||
Db          2 WIGWH 6
```

RESULT 11
AAB01509
ID AAB01509 standard; peptide; 6 AA.
XX
AC AAB01509;
XX
DT 08-NOV-2000 (first entry)
XX
DE Peptide which binds to transcription factor E2F-1 DNA binding domain.
XX
KW DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1;
KW activation; transcription; apoptosis; proliferative disorder;
KW psoriasis; restenosis.
XX
OS Synthetic.
XX
PN WO200044771-A1.
XX
PD 03-AUG-2000.
XX
PF 26-JAN-2000; 2000WO-GB00227.
XX
PR 26-JAN-1999; 99GB-0001710.
XX
PA (PROL-) PROLIFIX LTD.
XX
PI Mueller R, Kontermann RE, Montigiani S;
XX
DR WPI; 2000-532806/48.
XX
PT Peptides binding to the DNA binding domain of transcription factor E2F
PT and inhibiting cell cycle progression, useful for the treatment of
PT cancer
XX
PS Example; Page 26; 42pp; English.
XX
CC Peptides which bind to the DNA binding domain of transcription
CC factor E2F and inhibit cell cycle progression may be useful as
CC research agents to investigate the interaction between E2F and DP-1,
CC or the activation of transcription by E2F-1/DP-1 heterodimers. They
CC may also be used for inducing apoptosis and/or cell cycle arrest in
CC a cell, particularly for treatment of cancer or other proliferative
CC disorders such as psoriasis and restenosis.
XX
SQ Sequence 6 AA;

```
  Query Match             73.7%;  Score 28;  DB 21;  Length 6;
  Best Local Similarity   60.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXWH 5
              |  ||
Db          1 WVRWH 5
```

RESULT 12
ABR45591
ID ABR45591 standard; Peptide; 6 AA.
XX
AC ABR45591;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #781.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.
XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

```
  Query Match             73.7%;  Score 28;  DB 24;  Length 6;
  Best Local Similarity   50.0%;  Pred. No. 9.3e+05;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXWHF 6
              |  |:|
Db          1 WFFWYF 6
```

RESULT 13
ABR45592
ID ABR45592 standard; Peptide; 6 AA.
XX
AC ABR45592;
XX
DT 10-JUN-2003 (first entry)
XX
DE Staphylococcus aureus CHIPS-related peptide #782.
XX
KW CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR;
KW formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell;
KW inflammation; cardiovascular disease; central nervous system disease;
KW gastrointestinal disease; skin disease; genitourinary disease;
KW joint disease; respiratory disease; HIV infection; antiinflammatory;
KW cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
KW gynecological; immunosuppressive; anti-HIV.
XX
OS Staphylococcus aureus.
OS Synthetic.

XX
PN WO2003006048-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001WO-EP08004.
XX
PR 11-JUL-2001; 2001WO-EP08004.
XX
PA (JARI-) JARI PHARM BV.
XX
PI Van Kessel CPM, Gosselaar-de Haas CJC, Kruijtzer JAW;
PI Van Strijp JAG;
XX
DR WPI; 2003-247783/25.
XX
PT Combination of peptides derived from chemotaxis inhibiting protein from
PT Staphylococcus aureus (CHIPS) having CHIPS activity, useful in
PT prophylaxis and treatment of inflammation, cardiovascular, skin and
PT kidney diseases -
XX
PS Disclosure; Page 13; 89pp; English.
XX
CC The present invention relates to peptides (ABR44811-ABR47162 and
CC ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (CHIPS)
CC from Staphylococcus aureus. The peptide fragments are useful in the
CC prophylaxis or treatment of diseases or disorders involving the
CC C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or
CC neutrophils, monocytes and endothelial cells or involving acute or
CC chronic inflammation reactions. The diseases or disorders include
CC cardiovascular diseases, disease of the central nervous system,
CC gastrointestinal diseases, skin diseases, genitourinary diseases, joint
CC diseases, respiratory diseases and HIV infection.
XX
SQ Sequence 6 AA;

Query Match 73.7%; Score 28; DB 24; Length 6;
Best Local Similarity 50.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXWHF 6
| |:|
Db 1 WIFWYF 6

RESULT 14
AAY01258
ID AAY01258 standard; peptide; 7 AA.
XX
AC AAY01258;
XX
DT 01-JUN-1999 (first entry)
XX
DE US5851813 peptide sequence number 45.
XX
KW Antigenic composition; primate; lentivirus; nef gene; vaccine;
KW infection; AIDS; SIVmac239; deletion; mutant.
XX
OS Simian immunodeficiency virus.
OS Synthetic.
XX
PN US5851813-A.
XX
PD 22-DEC-1998.
XX
PF 27-JAN-1994; 94US-0188583.
XX
PR 27-JAN-1994; 94US-0188583.
PR 12-JUL-1990; 90US-0551945.
PR 09-JUL-1991; 91US-0727494.
XX
PA (HARD) HARVARD COLLEGE.
XX
PI Desrosiers RC;
XX
DR WPI; 1999-080408/07.
DR N-PSDB; AAX27657.
XX
PT Lentivirus antigenic compositions - containing lentivirus with nef
PT gene deletion
XX
PS Disclosure; Fig 5A-B; 93pp; English.
XX
CC The invention relates to an antigenic composition comprising an isolated
CC primate lentivirus whose genome contains an engineered non-revertible
CC null mutation in the nef gene, or an infectious DNA clone in a carrier.
CC The antigenic composition is used in vaccines against infection by the
CC lentivirus, e.g. AIDS.
XX
SQ Sequence 7 AA;

Query Match 73.7%; Score 28; DB 20; Length 7;
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXWH 5
| ||
Db 1 WEYWH 5

RESULT 15
AAB49729
ID AAB49729 standard; peptide; 7 AA.
XX
AC AAB49729;
XX
DT 10-APR-2001 (first entry)
XX
DE Peptide SEQ ID 40 which binds to the TADG5 protein.
XX
KW TADG5; human; zinc finger; SH3 domain; cell signalling;
KW cell cycle control.
XX
OS Unidentified.
XX
PN WO200102432-A1.
XX
PD 11-JAN-2001.
XX
PF 30-JUN-2000; 2000WO-US18304.
XX
PR 01-JUL-1999; 99US-0346510.
XX
PA (UYAR-) UNIV ARKANSAS.
XX
PI O'Brien TJ, Wang Y;
XX
DR WPI; 2001-123102/13.
XX
PT Novel SH3 domain-containing TADG5 protein useful for regulating gene
PT replication, as a nutrition supplement, and as a marker for human
PT tissue, or in cell cycle control -
XX
PS Example 6; Page 36; 85pp; English.
XX
CC This invention relates to an SH3 domain-containing protein termed TADG5,
CC and its variants. The invention includes amino acid and polynucleotide
CC sequences for TADG5, and oligonucleotides which bind to either the basic
CC amino acid region and/or the zinc finger motif of the TADG5 protein. The
CC basic amino acid region or zinc finger motif of TADG5 is useful for
CC regulating the expression of the TADG5 gene in a cell. The TADG5 protein
CC is useful as a source of amino acids, as a nutrition supplement, and as a
CC marker for human tissue, or in cell cycle control. TADG5 protein or
CC peptides generated from the protein sequence are useful as antigens for
CC the production of polyclonal and monoclonal antibodies. DNA encoding
CC TADG5 is useful as an antisense vehicle for cell cycle control by

CC shutting down signalling or cell division. The present sequence
CC represents a peptide identified from a phage display peptide library
CC through biopanning with the TADG5 protein.
XX
SQ Sequence 7 AA;

Query Match 73.7%; Score 28; DB 22; Length 7;
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWH 5
              |  ||
Db          3 WMDWH 7
```

Search completed: December 3, 2003, 11:51:16
Job time : 34.6667 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2003, 11:48:35 ; Search time 11 Seconds
(without alignments)
52.456 Million cell updates/sec

Title: US-09-912-414-11
Perfect score: 38
Sequence: 1 WXXWHF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 2520

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	23	60.5	9	2	S07241	litorin - Rohde's
2	22	57.9	9	2	S07205	litorin 2-Glu - Au
3	22	57.9	9	2	S07204	litorin I - Austra
4	22	57.9	10	2	F49033	T-cell receptor ga
5	22	57.9	13	2	A60409	bombesin-like pept
6	21	55.3	9	2	A43848	cell surface adhes
7	21	55.3	12	2	PH1308	Ig heavy chain DJ
8	20	52.6	12	2	PH1324	Ig heavy chain DJ
9	20	52.6	13	2	S61798	T-cell-specific tr
10	20	52.6	14	2	PH1322	Ig heavy chain DJ
11	18	47.4	9	2	D57444	neuropeptide Grb-A
12	17	44.7	12	2	A29169	phospholipase A2 (
13	17	44.7	15	2	PA0099	phenotipic variati
14	16	42.1	8	2	T13818	cytochrome oxidase
15	16	42.1	10	2	PQ0177	neuromedin C - lau
16	16	42.1	10	2	A60647	neuromedin C - bov
17	16	42.1	10	2	T13976	cytochrome-c oxida
18	16	42.1	10	2	T17057	cytochrome-c oxida
19	16	42.1	10	2	T12303	cytochrome-c oxida
20	16	42.1	10	2	T14019	cytochrome-c oxida
21	16	42.1	10	2	T17060	cytochrome-c oxida
22	16	42.1	10	2	T14043	cytochrome-c oxida
23	16	42.1	10	2	T14054	cytochrome-c oxida
24	16	42.1	10	2	T17066	cytochrome-c oxida
25	16	42.1	10	2	T17069	cytochrome-c oxida
26	16	42.1	10	2	T12308	cytochrome-c oxida
27	16	42.1	10	2	T17072	cytochrome-c oxida
28	16	42.1	10	2	T12312	cytochrome-c oxida
29	16	42.1	10	2	T12316	cytochrome-c oxida
30	16	42.1	10	2	T12321	cytochrome-c oxida
31	16	42.1	10	2	T14219	cytochrome-c oxida
32	16	42.1	14	1	BSTD	bombesin - fire-be
33	16	42.1	14	2	PT0077	proteochondoitin c
34	15	39.5	9	2	S56004	glucan 1,3-beta-gl
35	15	39.5	12	2	S25039	Ig heavy chain V r
36	15	39.5	13	2	S23372	T-cell receptor al
37	15	39.5	13	2	B25448	Ig kappa-1 chain,
38	15	39.5	13	2	B26406	Ig kappa chain J r
39	15	39.5	13	2	A47630	Ig kappa chain J r
40	15	39.5	15	2	S24159	leukocyte elastase
41	14	36.8	7	2	S21230	dermorphin (Trp-4,
42	14	36.8	10	2	A58365	neuropeptide FFRFa
43	14	36.8	10	2	T17054	cytochrome-c oxida
44	14	36.8	10	2	T17063	cytochrome-c oxida
45	14	36.8	10	2	T12325	cytochrome-c oxida

ALIGNMENTS

RESULT 1
S07241
litorin - Rohde's leaf frog
C;Species: Phyllomedusa rohdei (Rohde's leaf frog)
C;Date: 12-Feb-1993 #sequence_revision 12-Mar-1993 #text_change 18-Aug-2000
C;Accession: S07241
R;Barra, D.; Falconieri Erspamer, G.; Simmaco, M.; Bossa, F.; Melchiorri, P.; Erspamer
FEBS Lett. 182, 53-56, 1985
A;Title: Rohdei-litorin: a new peptide from the skin of Phyllomedusa rohdei.
A;Reference number: S07241; MUID:85127560; PMID:3838283
A;Accession: S07241
A;Molecule type: protein
A;Residues: 1-9 <BAR>
C;Superfamily: gastrin-releasing peptide
C;Keywords: amidated carboxyl end; blocked amino end; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;9/Modified site: amidated carboxyl end (Met) #status experimental

Query Match 60.5%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              |  ||
Db          3 WATGHF 8
```

RESULT 2
S07205
litorin 2-Glu - Australian tree frog (Litoria aurea)
C;Species: Litoria aurea
C;Date: 12-Feb-1993 #sequence_revision 12-Mar-1993 #text_change 18-Aug-2000
C;Accession: S07205
R;Anastasi, A.; Montecucchi, P.; Angelucci, F.; Erspamer, V.; Endean, R.
Experientia 33, 1289, 1977
A;Title: Glu(OMe)(2)-litorin, the second bombesin-like peptide occurring in methanol e:
A;Reference number: S07205; MUID:78003546; PMID:908397
A;Accession: S07205
A;Molecule type: protein
A;Residues: 1-9 <ANA>
C;Superfamily: gastrin-releasing peptide
C;Keywords: amidated carboxyl end; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;9/Modified site: amidated carboxyl end (Met) #status experimental

Query Match 57.9%; Score 22; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWHF 6
              |  ||
Db          3 WAVGHF 8
```

RESULT 3
S07204
litorin I - Australian tree frog (Litoria aurea)
C;Species: Litoria aurea
C;Date: 12-Feb-1993 #sequence_revision 12-Mar-1993 #text_change 18-Aug-2000
C;Accession: S07204
R;Anastasi, A.; Erspamer, V.; Endean, R.
Experientia 31, 510-511, 1975
A;Title: Aminoacid composition and sequence of litorin, a bombesin-like nonapeptide from
A;Reference number: S07204; MUID:75187011; PMID:1140241
A;Accession: S07204
A;Molecule type: protein
A;Residues: 1-9 <ANA>
C;Superfamily: gastrin-releasing peptide
C;Keywords: amidated carboxyl end; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;9/Modified site: amidated carboxyl end (Met) #status experimental

Query Match 57.9%; Score 22; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWHF 6
| ||
Db 3 WAVGHF 8

RESULT 4
F49033
T-cell receptor gamma chain V-D-J region - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 19-Dec-1993 #sequence_revision 17-Mar-2000 #text_change 17-Mar-2000
C;Accession: F49033
R;Morita, C.T.; Verma, S.; Aparicio, P.; Martinez, C.; Spits, H.; Brenner, M.B.
Eur. J. Immunol. 21, 2999-3007, 1991
A;Title: Functionally distinct subsets of human gamma/delta T cells.
A;Reference number: A49033; MUID:92083926; PMID:1684157
A;Accession: F49033
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-10 <MOR>
A;Cross-references: GB:S72605; NID:g240700; PIDN:AAB20632.1; PID:g240701
A;Note: sequence extracted from NCBI backbone (NCBIN:72605, NCBIP:72606)
C;Keywords: T-cell receptor

Query Match 57.9%; Score 22; DB 2; Length 10;
Best Local Similarity 40.0%; Pred. No. 3.7e+02;
Matches 2; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXWH 5
| |:
Db 4 WERWY 8

RESULT 5
A60409
bombesin-like peptide L - frog (Pseudophryne guentheri)
C;Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence_revision 30-Jan-1993 #text_change 18-Aug-2000
C;Accession: A60409
R;Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.; Melchior
Peptides 11, 299-304, 1990
A;Title: Six novel tachykinin- and bombesin-related peptides from the skin of the Austra
A;Reference number: A60409; MUID:90287814; PMID:2356157
A;Accession: A60409
A;Molecule type: protein
A;Residues: 1-13 <SIM>
C;Superfamily: unassigned animal peptides
C;Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;13/Modified site: amidated carboxyl end (Met) #status experimental

Query Match 57.9%; Score 22; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 4.6e+02;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 WXXWHF 6
| ||
Db 7 WAVGHF 12

RESULT 6
A43848
cell surface adhesin for heparan sulfate, 66K - Staphylococcus aureus (fragment)
C;Species: Staphylococcus aureus
C;Date: 10-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 24-Feb-1995
C;Accession: A43848
R;Liang, O.D.; Ascencio, F.; Fransson, L.A.; Wadstrom, T.
Infect. Immun. 60, 899-906, 1992
A;Title: Binding of heparan sulfate to Staphylococcus aureus.
A;Reference number: A43848; MUID:92176005; PMID:1541563
A;Accession: A43848
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-9 <LIA>
A;Note: sequence extracted from NCBI backbone (NCBIP:85442)

Query Match 55.3%; Score 21; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXW 4
| |
Db 2 WTGW 5

RESULT 7
PH1308
Ig heavy chain DJ region (clone C731-94) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: PH1308
R;Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.
J. Exp. Med. 176, 1577-1581, 1992
A;Title: Predominance of fetal type DJH joining in young children with B precursor lym
A;Reference number: PH1302; MUID:93094761; PMID:1460419
A;Accession: PH1308
A;Molecule type: DNA
A;Residues: 1-12 <WAS>
C;Keywords: heterotetramer; immunoglobulin

Query Match 55.3%; Score 21; DB 2; Length 12;
Best Local Similarity 40.0%; Pred. No. 6.2e+02;
Matches 2; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXWH 5
| |:
Db 7 WGQWN 11

RESULT 8
PH1324
Ig heavy chain DJ region (clone C510-100) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: PH1324
R;Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.
J. Exp. Med. 176, 1577-1581, 1992
A;Title: Predominance of fetal type DJH joining in young children with B precursor lym
A;Reference number: PH1302; MUID:93094761; PMID:1460419
A;Accession: PH1324
A;Molecule type: DNA
A;Residues: 1-12 <WAS>
C;Keywords: heterotetramer; immunoglobulin

Query Match 52.6%; Score 20; DB 2; Length 12;
Best Local Similarity 50.0%; Pred. No. 9e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXW 4
              | |
Db          5 WYYW 8
```

RESULT 9
S61798
T-cell-specific transcription factor 1 splice form G - human (fragment)
N;Alternate names: transcription factor TCF-1G
C;Species: Homo sapiens (man)
C;Date: 19-Mar-1997 #sequence_revision 18-Jul-1997 #text_change 24-Jul-1998
C;Accession: S61798; S61880
R;Mayer, K.; Wolff, E.; Clevers, H.; Ballhausen, W.G.
Biochim. Biophys. Acta 1263, 169-172, 1995
A;Title: The human high mobility group (HMG)-box transcription factor TCF-1: novel isofo
A;Reference number: S61796; MUID:95367594; PMID:7640309
A;Accession: S61798
A;Molecule type: mRNA
A;Residues: 1-13 <MAY>
A;Cross-references: EMBL:Z47364
A;Note: DNA was also sequenced
C;Keywords: alternative splicing; DNA binding; transcription factor

Query Match 52.6%; Score 20; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 9.7e+02;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy         -1 WXXW 4
              | |
Db          6 WDGW 9
```

RESULT 10
PH1322
Ig heavy chain DJ region (clone C344-99) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: PH1322
R;Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera, G.
J. Exp. Med. 176, 1577-1581, 1992
A;Title: Predominance of fetal type DJH joining in young children with B precursor lymph
A;Reference number: PH1302; MUID:93094761; PMID:1460419
A;Accession: PH1322
A;Molecule type: DNA
A;Residues: 1-14 <WAS>
C;Keywords: heterotetramer; immunoglobulin

Query Match 52.6%; Score 20; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 1e+03;
Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXW 4
              | |
Db          6 WDYW 9
```

RESULT 11
D57444
neuropeptide Grb-AST B4 - two-spotted cricket
C;Species: Gryllus bimaculatus (two-spotted cricket)
C;Date: 26-Jan-1996 #sequence_revision 26-Jan-1996 #text_change 26-Jan-1996
C;Accession: D57444
R;Lorenz, M.W.; Kellner, R.; Hoffmann, K.H.
J. Biol. Chem. 270, 21103-21108, 1995
A;Title: A family of neuropeptides that inhibit juvenile hormone biosynthesis in the cri
A;Reference number: A57444; MUID:95403341; PMID:7673141
A;Accession: D57444
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-9 <LOR>

Query Match 47.4%; Score 18; DB 2; Length 9;
Best Local Similarity 40.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```
Qy          1 WXXWH 5
              |  :|
Db          2 WERFH 6
```

RESULT 12
A29169
phospholipase A2 (EC 3.1.1.4) precursor - sheep (fragment)
C;Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 02-Jun-1988 #sequence_revision 02-Jun-1988 #text_change 31-Oct-1997
C;Accession: A29169
R;Dutilh, C.E.; Van Doren, P.J.; Verheul, F.E.A.M.; De Haas, G.H.
Eur. J. Biochem. 53, 91-97, 1975
A;Title: Isolation and properties of prophospholipase A2 from ox and sheep pancreas.
A;Reference number: A94661
A;Accession: A29169
A;Molecule type: protein
A;Residues: 1-12 <DUT>
C;Superfamily: phospholipase A2
C;Keywords: carboxylic ester hydrolase; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental

Query Match 44.7%; Score 17; DB 2; Length 12;
Best Local Similarity 66.7%; Pred. No. 2.8e+03;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy          4 WHF 6
              | |
Db         10 WQF 12
```

RESULT 13
PA0099
phenotipic variation protein - fungus (Fusarium sporotrichioides) (fragment)
C;Species: Fusarium sporotrichioides
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 20-Feb-1995
C;Accession: PA0099
R;Chow, L.P.; Fukaya, N.; Sugiura, Y.; Ueno, Y.; Tabuchi, K.; Tsugita, A.
submitted to JIPID, October 1994
A;Description: Two dimensional polyacrylamide gel electropheresis of Fusarium sporotri
A;Reference number: PA0051
A;Accession: PA0099
A;Molecule type: protein
A;Residues: 1-15 <CHO>

Query Match 44.7%; Score 17; DB 2; Length 15;
Best Local Similarity 66.7%; Pred. No. 3.3e+03;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy          4 WHF 6
              | |
Db          5 WEF 7
```

RESULT 14
T13818
cytochrome oxidase subunit I - Atlantic hagfish mitochondrion (fragment)
C;Species: mitochondrion Myxine glutinosa (Atlantic hagfish)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 21-Jul-2000
C;Accession: T13818
R;Delarbre, C.; Barriel, V.; Tillier, S.; Janvier, P.; Gachelin, G.
Mol. Biol. Evol. 14, 807-813, 1997
A;Title: The main features of the craniate mitochondrial DNA between the ND1 and the C
A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Accession: T13818
A;Status: preliminary; translated from GB/EMBL/DDBJ

A;Molecule type: DNA
A;Residues: 1-8 <DEL>
A;Cross-references: EMBL:Y09527; NID:g2340019; PIDN:CAA70718.1; PID:g2340022
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion

Query Match 42.1%; Score 16; DB 2; Length 8;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy          4 WHF 6
              | |
Db          6 WFF 8
```

RESULT 15
PQ0177
neuromedin C - laughing frog
C;Species: Rana ridibunda (laughing frog)
C;Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change 11-Jan-2000
C;Accession: PQ0177
R;Conlon, J.M.; O'Harte, F.; Vaudry, H.
Biochem. Biophys. Res. Commun. 178, 526-530, 1991
A;Title: Primary structures of the bombesin-like neuropeptides in frog brain show that b
A;Reference number: PQ0177; MUID:91315477; PMID:1859413
A;Accession: PQ0177
A;Molecule type: protein
A;Residues: 1-10 <CON>
A;Experimental source: brain
C;Superfamily: gastrin-releasing peptide
C;Keywords: amidated carboxyl end
F;10/Modified site: amidated carboxyl end (Met) #status predicted

Query Match 42.1%; Score 16; DB 2; Length 10;
Best Local Similarity 40.0%; Pred. No. 3.4e+03;
Matches 2; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy          1 WXXWH 5
              |   |
Db          4 WAVGH 8
```

Search completed: December 3, 2003, 11:54:09
Job time : 12 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2003, 11:44:55 ; Search time 7.33333 Seconds
(without alignments)
38.476 Million cell updates/sec

Title: US-09-912-414-11
Perfect score: 38
Sequence: 1 WXXWHF 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 795

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_41:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID		Description
1	23	60.5	9	1	LITR_PHYRO	P08946	phyllomedus
2	23	60.5	11	1	RANC_RANPI	P08951	rana pipien
3	22	57.9	9	1	LITO_LITAU	P08945	litoria aur
4	22	57.9	13	1	BOML_PSEGU	P42991	pseudophryn
5	21	55.3	10	1	LABA_JATMU	P13270	jatropha mu
6	19	50.0	9	1	COW_CONVE	P83047	conus ventr
7	16	42.1	10	1	GON2_CHEPR	P80678	chelyosoma
8	16	42.1	10	1	GRP_RANRI	P23260	rana ridibu
9	16	42.1	14	1	ALYT_ALYOB	P08944	alytes obst
10	15	39.5	15	1	RM12_YEAST	P36522	saccharomyc
11	14	36.8	10	1	FARP_MYTED	P42560	mytilus edu
12	14	36.8	11	1	CA22_LITCI	P82088	litoria cit
13	14	36.8	11	1	CA42_LITCI	P82092	litoria cit
14	14	36.8	11	1	MLG_THETS	P41989	theromyzon
15	14	36.8	13	1	CXA2_CONGE	P01520	conus geogr
16	14	36.8	13	1	MLA_ANOCA	P41589	anolis caro
17	14	36.8	13	1	MLA_CAMDR	P01198	camelus dro
18	14	36.8	15	1	AH2_PRUSE	P29260	prunus sero
19	14	36.8	15	1	DCMM_PSECH	P19917	pseudomonas
20	13	34.2	10	1	APE_CAPGI	P80474	capnocytoph
21	13	34.2	10	1	GON1_ALLMI	P37041	alligator m
22	13	34.2	10	1	GON2_CHICK	P37043	gallus gall
23	13	34.2	10	1	GON3_ONCKE	P20367	oncorhynchu
24	13	34.2	12	1	UR2A_CATCO	P04558	catostomus
25	13	34.2	12	1	UR2B_CATCO	P04559	catostomus
26	13	34.2	12	1	UR2B_CYPCA	P04561	cyprinus ca
27	13	34.2	12	1	UR2_GILMI	P01147	gillichthys
28	13	34.2	12	1	UR2_POLSP	P81022	polyodon sp
29	13	34.2	12	1	UR2_SCYCA	P35490	scyliorhinu
30	13	34.2	15	1	UC16_MAIZE	P80622	zea mays (m
31	12	31.6	6	1	LOK1_LOCMI	P41491	locusta mig
32	12	31.6	8	1	LCK2_LEUMA	P21141	leucophaea
33	12	31.6	8	1	LCK5_LEUMA	P19987	leucophaea
34	12	31.6	8	1	LCK7_LEUMA	P19989	leucophaea
35	12	31.6	10	1	AEGL_AGRAE	P83465	agrocybe ae
36	12	31.6	10	1	CA12_LITCI	P82086	litoria cit
37	12	31.6	10	1	CAER_LITXA	P56264	litoria xan
38	12	31.6	10	1	GON1_CHEPR	P80677	chelyosoma
39	12	31.6	10	1	HTF_TABAT	P14596	tabanus atr
40	12	31.6	11	1	RR2_CONAM	P42341	conopholis
41	12	31.6	15	1	RBS_PHYPA	P80657	physcomitre
42	11	28.9	4	1	OCP3_OCTMI	P58649	octopus min
43	11	28.9	5	1	BPP7_BOTIN	P30425	bothrops in
44	11	28.9	5	1	UF01_MOUSE	P38639	mus musculu
45	11	28.9	6	1	EI01_LITRU	P82096	litoria rub

ALIGNMENTS

RESULT 1
LITR_PHYRO
ID LITR_PHYRO STANDARD; PRT; 9 AA.
AC P08946;
DT 01-NOV-1988 (Rel. 09, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Rhodei-litorin.
OS Phyllomedusa rohdei (Rohde's leaf frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC Phyllomedusinae; Phyllomedusa.
OX NCBI_TaxID=8394;
RN [1]
RP SEQUENCE.
RC TISSUE=Skin secretion;
RX MEDLINE=85127560; PubMed=3838283;
RA Barra D., Erspamer G.F., Simmaco M., Bossa F., Melchiorri P.,
RA Erspamer V.;
RT "Rohdei-litorin: a new peptide from the skin of Phyllomedusa rohdei.";
RL FEBS Lett. 182:53-56(1985).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Skin.
CC -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC FAMILY.
DR PIR; S07241; S07241.
DR InterPro; IPR000874; Bombesin.
DR Pfam; PF02044; Bombesin; 1.
DR PROSITE; PS00257; BOMBESIN; 1.
KW Amphibian defense peptide; Bombesin family; Amidation;
KW Pyrrolidone carboxylic acid.
FT MOD_RES 1 1 PYRROLIDONE CARBOXYLIC ACID.
FT MOD_RES 9 9 AMIDATION.
SQ SEQUENCE 9 AA; 1090 MW; 4ECCC1E861ADC377 CRC64;

Query Match 60.5%; Score 23; DB 1; Length 9;
Best Local Similarity 50.0%; Pred. No. 1.3e+05;
Matches 3; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy          1 WXXWHF 6
              |  ||
Db          3 WATGHF 8
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RESULT 2
RANC_RANPI
ID RANC_RANPI STANDARD; PRT; 11 AA.
AC P08951;
DT 01-NOV-1988 (Rel. 09, Created)
DT 01-NOV-1988 (Rel. 09, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Ranatensin-C.
OS Rana pipiens (Northern leopard frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX NCBI_TaxID=8404;

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RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=84131098; PubMed=6141890;
RA   Nakajima T.;
RL   Unpublished results, cited by:
RL   Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
RL   Comp. Biochem. Physiol. 77C:99-108(1984).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation.
FT   MOD_RES      11     11       AMIDATION.
SQ   SEQUENCE   11 AA;  1304 MW;  D6C9885A61ADC366 CRC64;

  Query Match             60.5%;  Score 23;  DB 1;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 94;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWHF 6
              |   ||
Db          5 WATGHF 10


RESULT 3
LITO_LITAU
ID   LITO_LITAU     STANDARD;      PRT;     9 AA.
AC   P08945;
DT   01-NOV-1988 (Rel. 09, Created)
DT   01-FEB-1994 (Rel. 28, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Litorin.
OS   Litoria aurea (Green and golden bell frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Pelodryadinae; Litoria.
OX   NCBI_TaxID=8371;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=75187011; PubMed=1140241;
RA   Anastasi A., Erspamer V., Endean R.;
RT   "Aminoacid composition and sequence of litorin, a bombesin-like
RT   nonapeptide from the skin of the Australian leptodactylid frog
RT   Litoria aurea.";
RL   Experientia 31:510-511(1975).
RN   [2]
RP   SEQUENCE (METHYLATED VARIANT).
RC   TISSUE=Skin secretion;
RX   MEDLINE=78003546; PubMed=908397;
RA   Anastasi A., Montecucchi P.C., Angelucci F., Erspamer V., Endean R.;
RT   "Glu(OMe)3-litorin, the second bombesin-like peptide occurring in
RT   methanol extracts of the skin of the Australian frog Litoria aurea.";
RL   Experientia 33:1289-1289(1977).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   PIR; S07204; S07204.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation; Methylation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES       2      2       METHYLATION (PARTIAL).
FT   MOD_RES       9      9       AMIDATION.
SQ   SEQUENCE   9 AA;  1103 MW;  D7CCC1E862CDC366 CRC64;

  Query Match             57.9%;  Score 22;  DB 1;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.3e+05;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWHF 6
              |   ||
Db          3 WAVGHF 8


RESULT 4
BOML_PSEGU
ID   BOML_PSEGU     STANDARD;      PRT;     13 AA.
AC   P42991;
DT   01-NOV-1995 (Rel. 32, Created)
DT   01-NOV-1995 (Rel. 32, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Bombesin-like peptide L (PG-L).
OS   Pseudophryne guentheri (Guenther's toadlet).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
OC   Myobatrachinae; Pseudophryne.
OX   NCBI_TaxID=30349;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=90287814; PubMed=2356157;
RA   Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA   Roberts J.D., Melchiorri P., Erspamer V.;
RT   "Six novel tachykinin- and bombesin-related peptides from the skin of
RT   the Australian frog Pseudophryne guntheri.";
RL   Peptides 11:299-304(1990).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   PIR; A60409; A60409.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES      13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1372 MW;  D6DE0D24BD98C366 CRC64;

  Query Match             57.9%;  Score 22;  DB 1;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    3;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWHF 6
              |   ||
Db          7 WAVGHF 12


RESULT 5
LABA_JATMU
ID   LABA_JATMU     STANDARD;      PRT;     10 AA.
AC   P13270;
DT   01-JAN-1990 (Rel. 13, Created)
DT   01-JAN-1990 (Rel. 13, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Labaditin.
OS   Jatropha multifida (Physic nut).
OC   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC   Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
OC   eurosids I; Malpighiales; Euphorbiaceae; Jatropha.
OX   NCBI_TaxID=3996;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Latex;
RA   Kosasi S., van der Sluis W.G., Boelens R., T'Hart L.A., Labadie R.P.;
RT   "Labaditin, a novel cyclic decapeptide from the latex of Jatropha
RT   multifida L. (Euphorbiaceae). Isolation and sequence determination
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RT   by means of two-dimensional NMR.";
RL   FEBS Lett. 256:91-96(1989).
CC   -!- FUNCTION: LABADITIN IS AN ACTIVE PEPTIDE WHICH INHIBITS THE
CC       CLASSICAL PATHWAY OF COMPLEMENT ACTIVATION IN VITRO. ACTIVITY
CC       SEEMS TO BE BASED ON AN INTERACTION WITH C1.
CC   -!- PTM: This is a cyclic peptide.
CC   -!- DISEASE: LATEX OF THIS PLANT IS USED IN FOLKLORIC MEDICINE FOR
CC       TREATMENT OF INFECTED WOUNDS, SKINS INFECTIONS AND SCABIES.
SQ   SEQUENCE   10 AA;  1089 MW;  D98AAD6362D1B362 CRC64;

  Query Match             55.3%;  Score 21;  DB 1;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.9e+02;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              | |
Db          4 WTVW 7


RESULT 6
COW_CONVE
ID   COW_CONVE      STANDARD;      PRT;     9 AA.
AC   P83047;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Contryphan-Vn.
OS   Conus ventricosus (Mediterranean cone).
OC   Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC   Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC   Neogastropoda; Conoidea; Conidae; Conus.
OX   NCBI_TaxID=117992;
RN   [1]
RP   SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY.
RC   TISSUE=Venom;
RX   MEDLINE=21547785; PubMed=11688995;
RA   Massilia G.R., Schinina M.E., Ascenzi P., Polticelli F.;
RT   "Contryphan-Vn: a novel peptide from the venom of the Mediterranean
RT   snail Conus ventricosus.";
RL   Biochem. Biophys. Res. Commun. 288:908-913(2001).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC   -!- MASS SPECTROMETRY: MW=1088.6; METHOD=MALDI.
CC   -!- SIMILARITY: BELONGS TO THE CONTRYPHAN FAMILY.
KW   Toxin; Amidation; D-amino acid.
FT   DISULFID      3      9
FT   MOD_RES       5      5       D-TRYPTOPHAN.
FT   MOD_RES       9      9       AMIDATION.
SQ   SEQUENCE   9 AA;  1091 MW;  8D38676323676EBA CRC64;

  Query Match             50.0%;  Score 19;  DB 1;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.3e+05;
  Matches    2;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXW 4
              | |
Db          5 WKPW 8


RESULT 7
GON2_CHEPR
ID   GON2_CHEPR     STANDARD;      PRT;     10 AA.
AC   P80678;
DT   01-NOV-1997 (Rel. 35, Created)
DT   01-NOV-1997 (Rel. 35, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Gonadoliberin II (Gonadotropin-releasing hormone II) (GnRH-II)
DE   (Luliberin II).
OS   Chelyosoma productum.
OC   Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
OC   Phlebobranchia; Corellidae; Chelyosoma.
OX   NCBI_TaxID=71177;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=96413669; PubMed=8816823;
RA   Powell J.F.F., Reska-Skinner S.M., Prakash M.O., Fischer W.H.,
RA   Park M., Rivier J.E., Craig A.G., Mackie G.O., Sherwood N.M.;
RT   "Two new forms of gonadotropin-releasing hormone in a protochordate
RT   and the evolutionary implications.";
RL   Proc. Natl. Acad. Sci. U.S.A. 93:10461-10464(1996).
CC   -!- FUNCTION: Stimulates the secretion of gonadotropins; it stimulates
CC       the secretion of both luteinizing and follicle-stimulating
CC       hormones.
CC   -!- SUBUNIT: Homodimer; disulfide-linked.
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: GNRH NEURONS LIE WITHIN BLOOD SINUSES CLOSE TO
CC       THE GONODUCTS AND GONADS IN BOTH JUVENILES AND ADULTS, IMPLYING
CC       THAT THE NEUROPEPTIDE IS RELEASED INTO THE BLOODSTREAM.
CC   -!- MASS SPECTROMETRY: MW=1117.52; METHOD=MALDI.
CC   -!- SIMILARITY: Belongs to the GNRH family.
DR   InterPro; IPR002012; GnRH.
DR   PROSITE; PS00473; GNRH; 1.
KW   Hormone; Amidation; Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   DISULFID      6      6       INTERCHAIN.
FT   MOD_RES      10     10       AMIDATION (BY SIMILARITY).
SQ   SEQUENCE   10 AA;  1135 MW;  284B38D1EEB735A3 CRC64;

  Query Match             42.1%;  Score 16;  DB 1;  Length 10;
  Best Local Similarity   40.0%;  Pred. No. 1.3e+03;
  Matches    2;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWH 5
              | | |
Db          3 WSLCH 7


RESULT 8
GRP_RANRI
ID   GRP_RANRI      STANDARD;      PRT;     10 AA.
AC   P23260;
DT   01-NOV-1991 (Rel. 20, Created)
DT   01-NOV-1991 (Rel. 20, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Neuromedin C.
OS   Rana ridibunda (Laughing frog) (Marsh frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX   NCBI_TaxID=8406;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Brain;
RX   MEDLINE=91315477; PubMed=1859413;
RA   Conlon J.M., O'Harte F., Vaudry H.;
RT   "Primary structures of the bombesin-like neuropeptides in frog brain
RT   show that bombesin is not the amphibian gastrin-releasing peptide.";
RL   Biochem. Biophys. Res. Commun. 178:526-530(1991).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   PIR; PQ0177; PQ0177.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Bombesin family; Amidation.
FT   MOD_RES      10     10       AMIDATION.
SQ   SEQUENCE   10 AA;  1094 MW;  F81FBAE862CDC371 CRC64;

  Query Match             42.1%;  Score 16;  DB 1;  Length 10;
  Best Local Similarity   40.0%;  Pred. No. 1.3e+03;
  Matches    2;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWH 5
              | | |
Db          4 WAVGH 8
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RESULT 9
ALYT_ALYOB
ID   ALYT_ALYOB     STANDARD;      PRT;    14 AA.
AC   P08944;
DT   01-NOV-1988 (Rel. 09, Created)
DT   01-FEB-1994 (Rel. 28, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Alytesin.
OS   Alytes obstetricans (Midwife toad).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Archeobatrachia; Discoglossidae; Alytes.
OX   NCBI_TaxID=8443;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Skin secretion;
RX   MEDLINE=84131098; PubMed=6141890;
RA   Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
RT   "Active peptides in the skins of one hundred amphibian species from
RT   Australia and Papua New Guinea.";
RL   Comp. Biochem. Physiol. 77C:99-108(1984).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin.
CC   -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
CC       FAMILY.
DR   InterPro; IPR000874; Bombesin.
DR   Pfam; PF02044; Bombesin; 1.
DR   PROSITE; PS00257; BOMBESIN; 1.
KW   Amphibian defense peptide; Bombesin family; Amidation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES      14     14       AMIDATION.
SQ   SEQUENCE   14 AA;  1554 MW;  D3C4E4D3AF129666 CRC64;

  Query Match             42.1%;  Score 16;  DB 1;  Length 14;
  Best Local Similarity   40.0%;  Pred. No. 1.7e+03;
  Matches    2;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 WXXWH 5
              |  |
Db          8 WAVGH 12


RESULT 10
RM12_YEAST
ID   RM12_YEAST     STANDARD;      PRT;    15 AA.
AC   P36522;
DT   01-JUN-1994 (Rel. 29, Created)
DT   01-JUN-1994 (Rel. 29, Last sequence update)
DT   01-JUN-1994 (Rel. 29, Last annotation update)
DE   Mitochondrial 60S ribosomal protein L12 (YmL12) (Fragment).
GN   MRPL12.
OS   Saccharomyces cerevisiae (Baker's yeast).
OC   Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC   Saccharomycetales; Saccharomycetaceae; Saccharomyces.
OX   NCBI_TaxID=4932;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=91285106; PubMed=2060626;
RA   Grohmann L., Graack H.-R., Kruft V., Choli T., Goldschmidt-Reisin S.,
RA   Kitakawa M.;
RT   "Extended N-terminal sequencing of proteins of the large ribosomal
RT   subunit from yeast mitochondria.";
RL   FEBS Lett. 284:51-56(1991).
DR   SGD; L0002687; MRPL12.
KW   Ribosomal protein; Mitochondrion.
FT   NON_TER       15     15
SQ   SEQUENCE   15 AA;  1851 MW;  74BCD9FEDDDB3900 CRC64;

  Query Match             39.5%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   50.0%;  Pred. No. 2.7e+03;
  Matches    3;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 WXXWHF 6
              ||  :|
Db          1 WXDGYF 6


RESULT 11
FARP_MYTED
ID   FARP_MYTED     STANDARD;      PRT;    10 AA.
AC   P42560;
DT   01-NOV-1995 (Rel. 32, Created)
DT   01-NOV-1995 (Rel. 32, Last sequence update)
DT   30-MAY-2000 (Rel. 39, Last annotation update)
DE   FMRFamide-like neuropeptide ALAGDHFFRF-amide.
OS   Mytilus edulis (Blue mussel).
OC   Eukaryota; Metazoa; Mollusca; Bivalvia; Pteriomorphia; Mytiloida;
OC   Mytiloidea; Mytilidae; Mytilus.
OX   NCBI_TaxID=6550;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=93047883; PubMed=1358534;
RA   Walker R.J.;
RT   "Neuroactive peptides with an RFamide or Famide carboxyl terminal.";
RL   Comp. Biochem. Physiol. 102C:213-222(1992).
CC   -!- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELATED PEPTIDE)
CC       FAMILY.
DR   PIR; A58365; A58365.
KW   Neuropeptide; Amidation.
FT   MOD_RES      10     10       AMIDATION.
SQ   SEQUENCE   10 AA;  1180 MW;  C2F80CC9C1EAA87D CRC64;

  Query Match             36.8%;  Score 14;  DB 1;  Length 10;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          5 HF 6
              ||
Db          6 HF 7


RESULT 12
CA22_LITCI
ID   CA22_LITCI     STANDARD;      PRT;    11 AA.
AC   P82088;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Caerulein 2.2/2.2Y4.
OS   Litoria citropa (Australian blue mountains tree frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Pelodryadinae; Litoria.
OX   NCBI_TaxID=94770;
RN   [1]
RP   SEQUENCE, AND MASS SPECTROMETRY.
RC   TISSUE=Skin secretion;
RX   MEDLINE=20057701; PubMed=10589099;
RA   Wabnitz P.A., Bowie J.H., Tyler M.J.;
RT   "Caerulein-like peptides from the skin glands of the Australian blue
RT   montains tree frog Litoria citropa. Part 1. Sequence determination
RT   using electrospray mass spectrometry.";
RL   Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
CC   -!- FUNCTION: HYPOTENSIVE NEUROPEPTIDE (PROBABLE).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC   -!- PTM: Isoform 2.2Y4 differs from isoform 2.2 in not being
CC       sulfated.
CC   -!- MASS SPECTROMETRY: MW=1388; METHOD=Electrospray.
CC   -!- SIMILARITY: BELONGS TO THE GASTRIN/CHOLECYSTOKININ FAMILY.
DR   InterPro; IPR001651; Gastrin.
DR   PROSITE; PS00259; GASTRIN; FALSE_NEG.
KW   Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
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FT   MOD_RES       4      4       SULFATION.
FT   MOD_RES      11     11       AMIDATION.
SQ   SEQUENCE   11 AA;  1328 MW;  10DAB894EDD861BB CRC64;

  Query Match             36.8%;  Score 14;  DB 1;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 3e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          5 HF 6
              ||
Db          8 HF 9


RESULT 13
CA42_LITCI
ID   CA42_LITCI     STANDARD;      PRT;     11 AA.
AC   P82092;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   15-SEP-2003 (Rel. 42, Last annotation update)
DE   Caerulein 4.2/4.2Y4.
OS   Litoria citropa (Australian blue mountains tree frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
OC   Pelodryadinae; Litoria.
OX   NCBI_TaxID=94770;
RN   [1]
RP   SEQUENCE, AND MASS SPECTROMETRY.
RC   TISSUE=Skin secretion;
RX   MEDLINE=20057701; PubMed=10589099;
RA   Wabnitz P.A., Bowie J.H., Tyler M.J.;
RT   "Caerulein-like peptides from the skin glands of the Australian blue
RT   montains tree frog Litoria citropa. Part 1. Sequence determination
RT   using electrospray mass spectrometry.";
RL   Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
CC   -!- FUNCTION: HYPOTENSIVE NEUROPEPTIDE (PROBABLE).
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC   -!- PTM: Isoform 4.2Y4 differs from isoform 4.2 in not being
CC       sulfated.
CC   -!- MASS SPECTROMETRY: MW=1404; METHOD=Electrospray.
CC   -!- SIMILARITY: BELONGS TO THE GASTRIN/CHOLECYSTOKININ FAMILY.
DR   InterPro; IPR001651; Gastrin.
DR   PROSITE; PS00259; GASTRIN; FALSE_NEG.
KW   Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW   Pyrrolidone carboxylic acid.
FT   MOD_RES       1      1       PYRROLIDONE CARBOXYLIC ACID.
FT   MOD_RES       4      4       SULFATION.
FT   MOD_RES      11     11       AMIDATION.
SQ   SEQUENCE   11 AA;  1344 MW;  10DAB894F5B861BB CRC64;

  Query Match             36.8%;  Score 14;  DB 1;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 3e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          5 HF 6
              ||
Db          8 HF 9


RESULT 14
MLG_THETS
ID   MLG_THETS      STANDARD;      PRT;     11 AA.
AC   P41989;
DT   01-NOV-1995 (Rel. 32, Created)
DT   01-NOV-1995 (Rel. 32, Last sequence update)
DT   16-OCT-2001 (Rel. 40, Last annotation update)
DE   Melanotropin gamma (Gamma-melanocyte stimulating hormone) (Gamma-MSH).
OS   Theromyzon tessulatum (Leech).
OC   Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
OC   Rhynchobdellida; Glossiphoniidae; Theromyzon.
OX   NCBI_TaxID=13286;
RN   [1]
RP   SEQUENCE.
RC   TISSUE=Brain;
RX   MEDLINE=94298944; PubMed=8026574;
RA   Salzet M., Wattez C., Bulet P., Malecha J.;
RT   "Isolation and structural characterization of a novel peptide related
RT   to gamma-melanocyte stimulating hormone from the brain of the leech
RT   Theromyzon tessulatum.";
RL   FEBS Lett. 348:102-106(1994).
CC   -!- SIMILARITY: BELONGS TO THE POMC FAMILY.
DR   PIR; S45698; S45698.
KW   Hormone; Amidation.
FT   MOD_RES      11     11       AMIDATION.
SQ   SEQUENCE   11 AA;  1486 MW;  2DB8FACE6409C1E8 CRC64;

  Query Match             36.8%;  Score 14;  DB 1;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 3e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          5 HF 6
              ||
Db          5 HF 6


RESULT 15
CXA2_CONGE
ID   CXA2_CONGE     STANDARD;      PRT;     13 AA.
AC   P01520;
DT   21-JUL-1986 (Rel. 01, Created)
DT   21-JUL-1986 (Rel. 01, Last sequence update)
DT   28-FEB-2003 (Rel. 41, Last annotation update)
DE   Alpha-conotoxin GII.
OS   Conus geographus (Geography cone).
OC   Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC   Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC   Neogastropoda; Conoidea; Conidae; Conus.
OX   NCBI_TaxID=6491;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=81191854; PubMed=7014556;
RA   Gray W.R., Luque A., Olivera B.M., Barrett J., Cruz L.J.;
RT   "Peptide toxins from Conus geographus venom.";
RL   J. Biol. Chem. 256:4734-4740(1981).
RN   [2]
RP   DISULFIDE BONDS.
RX   MEDLINE=84280842; PubMed=6466616;
RA   Gray W.R., Luque F.A., Galyean R., Atherton E., Sheppard R.C.,
RA   Stone B.L., Reyes A., Alford J., McIntosh M., Olivera B.M.,
RA   Cruz L.J., Rivier J.;
RT   "Conotoxin GI: disulfide bridges, synthesis, and preparation of
RT   iodinated derivatives.";
RL   Biochemistry 23:2796-2802(1984).
CC   -!- FUNCTION: Alpha-conotoxins act on postsynaptic membranes, they
CC       bind to the nicotinic acetylcholine receptors (nAChR) and thus
CC       inhibit them.
CC   -!- SUBCELLULAR LOCATION: Secreted.
CC   -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC   -!- SIMILARITY: BELONGS TO THE A-SUPERFAMILY OF CONOTOXINS. ALPHA-TYPE
CC       FAMILY.
DR   PIR; A01783; NTKN2G.
DR   HSSP; P56973; 1B45.
KW   Postsynaptic neurotoxin; Neurotoxin; Toxin;
KW   Acetylcholine receptor inhibitor; Amidation.
FT   DISULFID      2      7
FT   DISULFID      3     13
FT   MOD_RES      13     13       AMIDATION.
SQ   SEQUENCE   13 AA;  1422 MW;  DEEE831C39297EBD CRC64;

  Query Match             36.8%;  Score 14;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 3.4e+03;
  Matches    2;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          5 HF 6
              ||
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Db 10 HF 11

Search completed: December 3, 2003, 11:51:52
Job time : 8.33333 secs